

NUMBER 9
REPORTS OF THE AMERICAN INDIAN FAMILY HISTORY PROJECT
PART ONE: INTRODUCTION
Frederick E. Hoxie, Richard A. Sattler,
and Nancy Shoemaker
1992

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for the Humanities

TABLE OF CONTENTS

I.	Description of the Project	1
A.	Introduction	1
B.	Description of the Data: Censuses of American Indians	6
C.	Description of the Sample Communities	9
II.	Collecting and Processing the Data	31
III.	Description of Variables	34
IV.	The Individual Censuses: Profiles and Data Summaries	53
A.	1885	53
B.	1900	74
C.	1910	115
D.	1930	155
V.	Conclusions and Description of Subsequent Reports ..	175
VI.	Bibliography	179
VII.	Appendix: The Data Sets	184

Part One: DESCRIPTION OF THE PROJECT

A. Introduction

A generation ago, European scholars began to explore the family as an historical institution. Pioneering works such as Philippe Aries's Centuries of Childhood: A Social History of Family Life and Peter Laslett's The World We Have Lost turned the attention of scholars away from kings and presidents and towards the history of everyday life. In the United States, rising interest in this history, and a renewed public debate over the state of the modern family has fueled a similar interest in social history and the role of domestic institutions in the national past. Herbert Gutman's landmark study, The Black Family in Slavery and Freedom, 1750-1820 epitomized this new scholarship.

It is remarkable that despite the growth of scholarly interest in social and family history, no attention has been paid to the history of American Indian families. Despite a century of scholarship in cultural anthropology and dozens of museum collecting programs that have transported carloads of everyday

material objects from Indian communities to display cases, there has been no academic interest in the structure and function of Indian families in the recent past. Kinship studies have proliferated, and a new literature on Native American demography has emerged, but until recently none of this has attempted to link Indian people to the larger history of the family in Europe and America. One example alone will buttress this last point: the ten-year cumulative index of the Journal of Family History, published in 1987, does not contain a single entry on American Indians.

Recently this situation has begun to change. In 1991, the American Indian Quarterly published a special issue on Native American family history. It contained contributions by several authors covering a range of topics and tribal populations. Other articles have appeared in the last few years in Social Science History and the Journal of Family History.

The failure of researchers to examine the history of Indian families would seem in itself to justify an exploration of the subject, but in recent years another factor has emerged to amplify the attractiveness of the field. Throughout the twentieth century there has been a continuous increase in the size and assertiveness of America's Indian communities. From a lowpoint of 250,000 the national Native American population rose to nearly 350,000 in 1930 and then to more than 500,000 in 1960. In the last thirty years this figure has risen even more rapidly, to nearly 800,000 in 1970, 1.3 million in 1980 and nearly 2

million in 1990. These figures reflect both a strong demographic trend and a resurgence of cultural pride. They also indicate that Native Americans survived the forced assimilation of the early twentieth century with their identities and institutions intact. Explaining this phenomenon calls forth a variety of questions about Indian families. One asks, for example, "To what extent have families been altered by the pressures of modern life? Have some forms of family life been more "successful" as bulwarks against outside interference? And how have older patterns been maintained in Indian family behaviors?"

The most difficult period for Native Americans was the half-century from 1880 to 1930 when official federal policy stressed the necessity of Indian assimilation. During these years reservations were dismantled, tribal governments destroyed and local institutions abolished in an effort to, in the words of one reformer, "kill the Indian and save the man." These fifty years were also characterized by a dramatic rise in the national population and economy. Even if the government had been neutral, there would have been dramatic changes in Indian communities caused by the growth of commercial agriculture, the emergence of modern transportation systems, and the transition of the United States to a multicultural, urban nation. Each of these trends would challenge a tribal world marked by self-sufficiency, face-to-face politics and reverence for tradition.

The American Indian Family History Project is a response to the need for information regarding the history of Native American

social life in the twentieth century. By compiling information about families and tracking the ways in which both the structure and behavior of those families changed through time, the project will provide scholars with a clearer picture of community life in an age of transition. The project is intended to stimulate new scholarship on the history of Indian families by tracing the outlines of this unstudied subject and suggesting ways in which it examined in the future. This examination, in turn, should help turn academic attention away from wooden categories of kinship and social structure and toward a more dynamic understanding of Indian life.

Too often the scholarly literature on modern American Indian social life focuses on pathology: divorce, suicide, and alcoholism. This perspective is not only potentially skewed, but it emphasizes the differences between Native Americans and others. By gathering, organizing and analyzing a substantial body of data on Indian families, this project can shift the focus of scholarship to a universal institution and a more complex subject. The project will not only elevate a previously-ignored aspect of community life, but it will help teachers and students grasp the richness and the continuities imbedded in these indigenous American communities.

The impetus for the American Indian Family History Project came from a research conference sponsored by the Newberry Library and supported by the National Endowment for the Humanities in February, 1987. The conference brought together scholars from

the fields of history, anthropology and sociology to examine new methods for studying the history of Native American communities. After two days of formal papers and discussions, the group recommended that a project be devised to use statistical methods in an effort to shed new light on recent Indian history. Specifically, the group recommended that the vast storehouse of censuses of American Indian tribes be studied in a pilot project. These censuses consist of tribal enumerations conducted by the Bureau of Indian Affairs and the Census Bureau. The Indian Office began its data collection in 1832 and conducted annual censuses on all reservations beginning in about 1880. The Census Bureau carried out special enumerations in 1880, 1900 and 1910. These data made it possible to imagine a project that compared a variety of reservations settings over an extended period. Despite their many flaws, the census materials provided an opportunity to construct a fresh profile of Indian life during a period of dramatic cultural change.

A proposal for to trace the history of American Indian family life from 1880 to 1930 through the collection and analysis of census data was submitted to the National Endowment for the Humanities Division of Research Programs in late 1987 and was approved in the spring of 1988. Work began that fall and continued through the summer of 1992. This series of reports will bring the results of project research to a scholarly audience.

B. Description of the Data: Censuses of American Indians

The American Indian Family History Project collected in machine-readable form census data for Indian communities in the period 1885-1930. Data was collected for the following communities: the Creek Indians in Oklahoma, White Earth Chippewas, the Crows in Montana, the Colvilles in Washington State, and the Hopis in Arizona. These data came from two different sources: Bureau of Indian Affairs censuses and federal censuses collected as part of the regular decennial enumeration.

Bureau of Indian Affairs censuses: In 1885, the Bureau of Indian Affairs began requiring its Indian agents to submit annual censuses of the Indians within their jurisdiction. These documents are essentially enrollment lists which give names and other information for each member of the tribe. Since these lists were enrollment lists and were not based on residence, they may exclude some people (intermarried whites and Indians from other tribes or bands, for instance) who lived with tribal members.

Federal censuses: Indians living on reservations were first enumerated in the U.S. federal census in 1890, but the manuscript forms for this census have not survived. The 1900 and 1910

federal censuses are available on microfilm and both used a special form to enumerate Indians living on reservations and in other Indian communities. Along with the questions on the regular census form, the Indian form asked supplemental questions such as tribe, father's tribe, mother's tribe, whether living in polygamy, and whether allotted.

Anyone using these data should keep in mind that the populations in the two censuses are somewhat different. Indian Affairs listed tribal members; federal censuses listed people by residence. The federal censuses have considerable more detail than the Indian Affairs censuses, but are only available for 1900 and 1910. We collected data from the 1885 and 1930 Indian Affairs censuses so that we could look at change over time. There were, however, no BIA censuses for the Creeks.

The following list describes what data sets are available for each of the five groups. Most data sets came from one of three National Archives microfilm collections: the 1900 Federal Census of Population (T623), the 1910 Federal Census of Population (T624), and Bureau of Indian Affairs Censuses (M595). Because of the large size of the Creek population, we limited the 1910 data to two counties within the former boundaries of the Creek Nation.

INDIAN TRIBE	YEAR	CENSUS TYPE	GEOGRAPHIC AREA	MICROFILM COLLECTION/ REEL NUMBER
COLVILLE	1885	BIA	Colville Agency (includes Spokane Reservation)	M595/49
	1900	FED	Colville Reserv.	T623/1754
	1910	FED	Ferry & Okanagan Cties	T624/1654,1667
	1930	BIA	Colville Reserv.	M595/55
CREEK	1900	FED	Creek Nation	T623/1853,1854
	1910	FED	Okfuskee Cty Okmulgee Cty	T624/1265,1267
CROW	1886-7	BIA (special)	Crow Reservation	Crow Records, Seattle Reg. Archs., Box 154
	1891	BIA	"	M595/79
	1900	FED	"	T623/915
	1910	FED	"	T624/835, 837
	1920	BIA	"	M595/
	1930	BIA	"	M595/83
HOPI	1885	BIA	Moqui Agency*	M595/268
	1900	FED	Moqui Reservation*	T623/46
	1910	FED	Moqui Reservation* Coconino & Navajo Cties	T624/39,41
	1910	BIA	Moqui Reserv.*	M595/268
	1930	BIA	Hopi Reservation*	M595/190
* Excludes Navajos living in the area.				
WHITE EARTH	1885	BIA	White Earth Reservation	M595/649
	1900	FED	"	T623/798
	1910	FED	" (in Becker, Clearwater, & Mahnomen cties)	T624/689,710
	1930	BIA	"	M595/65

Coded data sets for each of these tribes for each census used in the project are included at the end of this volume.

C. Descriptions of Sample Communities

Data were collected from five reservation communities for the period 1880-1930. This selection was made as a way of sampling the vast amount of data available from the National Archives and to structure a comparison between a variety of Indian communities. The project staff also made these selections to take advantage of the expertise of individuals who were already at work on some aspect of the social history of the community under study. Thus, a community that was currently being studied had priority over one which was not. Based on these criteria, the following communities were selected for data collection: Colville, Creek, Crow, Hopi and White Earth. They represented five different regions and cultural areas as well as a variety of economic histories, social profiles and patterns of interaction with non-Indians.

COLVILLE

The Colville Reservation was first established in 1872 by an agreement with the Sanpoil Indians. While the original reservation was located east of the Columbia River it was quickly moved to the west side of that river to separate the Sanpoil from white settlers. The original reservation was bounded by the Columbia River on the east and south, the Okanogan River on the

west, and the Canadian border on the north. In 1879, the Columbia Confederacy under Chief Moses was granted a reservation west of Colville and this was expanded in 1880. In 1883, another group, the Columbia sold their reservation to the U.S. government and relocated to Colville. They were joined in 1885 by the Wallowa Nez Perces under Chief Joseph. Joseph's people had been confined to an agency in Oklahoma following their "war" with the United States in 1877 and they returned to the Northwest (although not to their ancestral lands) at the invitation of Chief Moses.

Several different groups were brought to the reservation in the 1870s and 1880s, but in the 1890s the government began to take steps that would reduce the size of Indian landholdings. 660 Colville Indians were given 80 acre allotments in the northern half of the reservation in 1892. White miners were allowed to file claims in the northern half of the reservation after 1896 and this areas was opened to white homesteaders in 1900. During the next decade, attention was focused on the southern half of the reservation. An agreement negotiated with the infamous Inspector James McLaughlin allotted the southern portion of the reserve in 1905 (though the process was not completed until 1914).

With the relocation of the Columbia Indians in 1883, all of the Interior Salish Indians of Washington state were concentrated on this reservation. These represented several tribes including the Moses-Columbia, the Peskwaws (Wenatchis), Chelans, Entiats,

Colvilles, Sanpoils, Nespelems, Okanogans, and Methow. Two Salishan dialect chains were represented by these tribes. One consisted of the first four tribes and the other by the remainder, except for the Methow, who occupied an intermediate position. The Nez Perce spoke an unrelated language, Sahaptin. As a result, the "Colville Indians" were actually a collection of neighboring bands who had been grouped together by federal officials both to protect them from white encroachments and to concentrate them into a community that might be more easily instructed in "civilized habits."

Catholic missions were established among the Columbia River Salish fifty years before the creation of the reservation. These continued to function in the period under study. Most Indians on Colville had become nominal Christians by 1900. The most notable exception to this pattern were the Sanpoil, but even church-going Colvilles retained some traditional beliefs and practices. Most Christians were Catholics, but minority pockets of Shakers and Protestants were also present. In addition to evangelizing the natives, the missions also provided schools. The United States government also established federal Indian schools on the reservation during the late nineteenth century. Many Colville had some education by 1900, though few went farther than the fifth grade. The Sanpoil and Nespelem, under the influence of their anti-white prophet Skolaskin, resisted most European influences until his death in 1914.

Each group at Colville occupied a particular portion of the

reservation, but all were extensively intermarried so that members of each tribe resided in a variety of locations. Such intermarriage had long been traditional in the area and had represented a primary means of alliance formation. Prior to the 1890s, the Colville Indians dispersed to seasonal procurement camps during the summer and consolidated in large, permanent villages in the winter.

Subsistence was based on a combination of hunting, fishing, and gathering wild plants. Salmon, deer, and various roots were particularly important. Following 1890, many of the Indians began shifting to agriculture, employing shovels and hoes at first, but later employing plows. Small gardens and farms were planted around the sites of winter villages. Horses were introduced onto the Plateau early in the nineteenth century, and stock raising remained an important economic activity for many tribes through the twentieth century. Foraging, remained important as well, though progressively as a supplement, rather than as the central element. Wage labor on farms, in mining camps, and in local towns also offered economic opportunities for many Colvilles. By the 1930s, a mixed economy incorporating all of these elements had emerged on the reservation, though individuals differed in their emphasis.

CREEK

The Creek Confederacy emerged in the late seventeenth century through the alliance of three Muskogean paramount

chiefdoms centered on the Chattahoochee, Coosa, and Talapoosa rivers in Georgia and Alabama. During the eighteenth century, the Confederacy expanded to include other tribes in the region as well. Most of these tribes spoke Muskogean languages except the Yuchi and Natchez. By the late eighteenth century two of these languages, Muskogee (Creek) and Hitchiti, dominated with the former acting as the lingua franca for the Confederacy.

As the confederacy consolidated its power during the eighteenth century, it came to constitute a true national government. The Lower Creeks, settled on the Chattahoochee River and its tributaries, dominated the Confederacy through their capital town of Coweta. The Creeks living on the Coosa and Talapoosa rivers, known as Upper Creeks, sporadically resisted this Lower Creek dominance during the eighteenth century. They even gained temporary ascendancy during the 1780s and early 1790s under Alexander McGillivray, a mixed-blood member of the Alabama tribe. Political tension among the constituent groups of the confederacy, particularly between the Upper and Lower Creeks, provided an important dynamic throughout Creek history as the original chiefdoms continued to function in an attenuated form into the early nineteenth century.

The Creeks participated heavily in the southern deerskin trade from the late seventeenth century through the early nineteenth century. This activity brought them into contact with large numbers of traders, mostly Englishmen and Scots, who resided and intermarried with the tribe. Their descendents

formed a relatively large mixed-blood population and a major conduit for the introduction of new ideas and practices into Creek society. While the mixed-bloods varied in the extent to which they embraced Euro-American beliefs and practices, many became middlemen in the trade. A few mixed children of British traders established small plantations and commercial enterprises, often employing African slaves after the American Revolution. By the 1820s, these operations became more common and much larger, some comparable to white plantations in the South. Most such operations were centered in the Lower Creek towns, though some were present among the Upper Creeks as well. Many of the leaders and prominent families among the Lower Creeks belonged to this new planter and mercantile class, which included full-bloods as well as mixed-bloods. Class divisions thus added to the strains on Creek society and exacerbated existing cleavages between groups within the nation.

The early nineteenth century was a period of extreme stress on Creek society. Pressure from American settlers increased, the deerskin trade collapsed, and the ascendancy of the United States undermined the international balance of forces which had sustained Creek autonomy for centuries. The activities of the Euro-american traders and partially acculturated mixed-bloods also disrupted the social fabric, while the growing centralization of power in the Confederacy and the dominance of the Lower Creeks and Coweta exacerbated internal political tensions. These tensions exploded in the Redstick movement and

the Creek War of 1813-1814, a conflict which pitted "full-blood" traditionalists and Upper Creeks against acculturated "mixed-bloods" and Lower Creeks. American intervention resulted in a victory for the latter, but did not erase the social tensions that had produced the conflict.

Continued pressure from the Americans for land cessions led to the passage of a law by the Creek National Council in the 1810s which made any unauthorized sales of tribal property a capital offence. In 1824, William McIntosh and a few other Lower Creek chiefs signed the Treaty of Indian Springs, cedeing all of the Creeks' Georgia lands and some of those in Alabama in exchange for lands in what is now Oklahoma. McIntosh was soon executed for this illegal act. In 1829, 780 followers of McIntosh from the Lower Creek towns voluntarily emigrated west, settling at the forks of the Arkansas, Verdigris, and Grand rivers in modern Oklahoma. The remaining Lower Creek towns moved west from Georgia to Alabama. In 1832, the Creek Nation capitulated to mounting pressure from the Americans and signed a removal treaty in Washington, D. C. This treaty provided for the removal of most of the Creeks to what is now eastern Oklahoma, but allowed those who wished to remain in the East to take individual allotments and become citizens of the states. Removal began in 1836. Some towns, mostly Lower Creeks, resisted removal and another Creek War erupted that same year. While most Creeks emigrated in 1836, small parties continued to do so until 1850 as those who took allotments discovered the United States unwilling

or unable to protect them from harrassment and persecution by local whites.

At the time of the 1836 removal, the Creeks had a population of about 22,000 divided among 45 towns (italwa). These "towns," political divisions which often contained several settlements, were the basic political and ceremonial units of Creek society. In the eighteenth century and earlier, the towns were joined in several paramount chiefdoms. By the early nineteenth century the paramount chiefdoms had disappeared, replaced by councils for the Upper and Lower Creeks and the National Council. Removal was by town and upon arrival in the West, Creeks reestablished their old tribal towns. Most of the Lower Creek towns which had remained in the east settled along the Arkansas River near the McIntosh's settlements. The Upper Creek towns settled along the Canadian and North Canadian rivers, west to the Little River.

The Creek lands in modern-day Oklahoma were bounded on the east by a line from the forks of the North Canadian and Canadian rivers northwest to the juncture of the Arkansas, Verdigris, and Grand rivers and then due north to the Cherokee Outlet which formed the territory's northern boundary. The Canadian River formed the southern boundary and the 100th meridian served as the western boundary. Creek settlements occuppied only the eastern portion of these lands, however, with the densest population centers near the juncture of the Arkansas and Canadian rivers, where the commercial center of North Fork Town was soon established. An agency was established at Fort Gibson, near the

junction of the Arkansas and Verdigris rivers and it too became a commercial center.

The Upper and Lower Creeks remained divided and maintained separate councils until 1840, when the National Council was reestablished. The Lower Creeks had adopted a written legal code in 1826 and the Upper Creeks did so shortly after removal. The reunited National Council adopted a uniform code of laws as its first act. This evolved into a comprehensive code by 1861. By 1859, they had adopted a written constitution and attempted to make national offices elective. The Lower Creek Principal Chief served as head of the Nation. The Upper and Lower Creek councils continued and served as courts. There was a right of appeal to the National Council. The individual towns handled most civil cases. A national police force, called the lighthorsemen, was established at this same time. By 1861 the Creeks had evolved from a loose confederation to a centrally-administered national state. Most of these changes were administrative, however, as most Creek townspeople probably noticed little difference in their daily lives.

While some of the Lower Creeks established plantations on the fertile bottoms of the Arkansas and Verdigris rivers, most Creeks continued their earlier pattern of communally worked town fields and smaller, individually cultivated plots near their homes. In the 1840s, however, many of the more traditional Creeks also began establishing individual fields in addition to their town fields. A number of Creek mixed-bloods also engaged in

various mercantile endeavors and, as in the past, a large number of white traders operated in the Creek Nation.

While missionaries had been active among the Creeks since the early 1800s, these had little effect before removal. Between 1830 and 1832, the Presbyterians, Baptists, and Methodists established missions among the Lower Creeks on the Arkansas. Initially, these also had few converts except among the black slaves. In 1836, the Creeks banned preaching, owing to a belief that missionaries had been partially responsible for their removal from the East. This ban carried a penalty of twenty-five lashes for the first offence and fifty for the second. Because the missionaries operated day schools, institutions appealing to the mixed-bloods, the ban was not totally enforced. A boarding school was established in 1842 and followed by two more in 1847 at North Fork Town and Tullahassee. All of these were operated by missionaries. The ban on Christian preaching was formally lifted in 1848. Citizens were required by law, however, to attend the native religious ceremonies of their tribal town. A national school system of seven day schools was also established in 1856.

The Creeks entered the American Civil War in 1861, when the national officials signed a treaty with the Confederacy. Dissidents disputed the legitimacy of this treaty and many fled to Kansas under the leadership of Opoethleyahola (Hopoi-hithli Yahola). The tribe was about equally divided between Union and Confederate sympathizers and the division seems to have followed

town lines. Most of the Union dissidents came from the conservative and Upper Creek towns. During the course of the war, most of the Creeks on both sides were forced to abandon their homes and most of their property was destroyed. Following the war the Creeks were forced to negotiate and sign a new treaty with the United States that ceded the western half of their territory.

In 1867, the two Creek factions reunited and established a new constitution and code of laws. Both of these derived largely from earlier versions. The new constitution reorganized the national council and limited its membership. Despite some opposition from Creek citizens, all slaves were freed and given tribal citizenship. As national representation was based on tribal town, the freedmen were organized into three towns. Repressive slave codes were also repealed. A national judicial system with six judicial districts and a supreme court was also established.

Conflicts between conservative and progressive elements continued after the Civil War, leading to a series of armed standoffs in the 1870s and the Green Peach War of 1882. By 1879 this tension also led to the development of national political parties within the Creek community. The parties only operated in national elections and seem not to have affected local officials.

In part the continuing conflicts among Creeks were a product of economic and social differences, for the acculturated, mixed-bloods generally followed Euro-American economic strategies,

while conservatives retained a more traditional pattern of subsistence agriculture, supplemented by trade and occasional wage labor. Some of the mixed-bloods were engaged in agribusiness and large scale stockraising. Some individuals sold as many as 20,000 cattle a year on the national market. Others operated successful mercantile operations. These entrepreneurs did not differ significantly from their white counterparts in Arkansas and Texas and many were quite wealthy. Their opponents within the tribe, generally farmed only 6-20 acres and seldom owned more than 20 horses or 50 cattle. Few of these conservatives attended school or the Christian church, and most spoke only Muskogee. (Church membership did begin to rise at the end of the nineteenth century.) Most mixed-bloods had some schooling, were Christians, and spoke English.

Under the provisions of the 1898 Curtis Act, the Creeks and other Five Civilized Tribes were brought under the General Allotment Law, in the process losing control over their tribal affairs. An agreement was signed with the United States shortly after the passage of the act and the Creek lands were surveyed and divided among the tribal citizens. About forty acres of each person's allotment represented a "homestead" and was inalienable for twenty years. The remainder could be sold with the permission of the Commissioner of Indian Affairs. An effort was made to include the person's residence in the homestead allotment.

Allotment was largely completed by 1906, though some

adjustments and additional allotments were made through 1913. A number of conservative Creeks, mostly from Upper Creek towns in modern Okmulgee and Okfuskee Counties, actively, and occasionally violently, opposed allotment and the dissolution of the tribal government. These recalcitrants, called "Snakes" after their leader Chitto Hacho (Crazy Snake), refused to take allotments. Some had allotments assigned to them by the federal commissioners, but others never received any land at all.

White settlers began moving into Indian Territory in large numbers after 1900. After Oklahoma statehood in 1907, the rate of land transfers from Indians to Whites increased markedly. The largest transfers of land (many of them fraudulent) occurred after the discovery of oil beneath Creek lands in the 1910s. In 1900, only a relatively few whites lived in the Creek Nation, mostly centered around Fort Gibson, Muskogee, and the capital of Okmulgee. By 1910, the year of the final enumeration available for this study, the Creeks were a minority in their own territory, had lost most of their lands, their national government had been abolished by federal law, and they were citizens of the state of Oklahoma and the United States.

CROW

Crow migrations onto the Great Plains began towards the end of the first millenium A.D. when corn agriculture spread to the Missouri River Valley from the south and east. At that time ancestors of the modern Crows began living in villages along the

Missouri in present day North Dakota, cultivating crops on rich bottom lands and hunting big game on the surrounding prairies. Almost at once, however, groups of these villagers began exploring the hunting grounds to the west. By 1500 bands of hunters were spending extended periods on the Upper Missouri and Yellowstone. The migration of these bands is recorded largely in Crow oral tradition which says that groups moved north and south, experimenting with various locations, until they settled in a huge triangle marked by the headwaters of the Missouri in northern Montana, the Wind River range in central Wyoming, and the agricultural villages they had recently left behind. By the time the Crows' southern neighbors brought them the horse in the early eighteenth century, this area had become the permanent home of a group of related bands who lived by hunting and gathering.

The advent of the horse and contact with Europeans tied the Crows more securely to their country. Focusing their settlements in the Yellowstone and Upper Missouri valleys, Crow bands radiated outward to hunt and to trade with their neighbors for horses, guns and foodstuffs. Their first official contact with the United States came in 1825 when a Crow leader named Long Hair signed a treaty of friendship with Army Captain Henry Atkinson at a conference on the Missouri River. Twenty-six years later the American government attempted to define the exact boundaries of Crow country in a new treaty signed at Fort Laramie in southeastern Wyoming. The 1851 agreement recognized the tribal domain as encompassing a giant ellipse, with borders at the Powder

River on the east, the Wind River range on the south, Yellowstone park on the west, and the mouth of the Musselshell on the Upper Missouri on the north. Almost as soon as they were established, however, these boundaries began to shrink.

During the 1850s and 1860s, miners, rival tribes such as the Sioux and Shoshone, and enterprising railroad men pressed in on the Crows. By 1868, when the federal government stepped forward again to adjudicate these conflicts, the Crows could win recognition for only a portion of their lands. A treaty signed that year at Fort Laramie reduced their territory by 30 million acres and created the Crow reservation. Encompassing most of the south side of the Yellowstone valley from a point just east of the Little Big Horn river, the new reservation eliminated all of the Crow lands north of the river and south of the surveyor's line that separated Montana Territory from the new state of Wyoming. During the next two decades the advent of railroads and large-scale white settlement brought pressure for further cessions from the tribe. Land sales in 1882 and 1891 removed the headwaters of the Yellowstone and the upper reaches of the Yellowstone valley from tribal control. A final sale in 1904 eliminated all the lands north of the confluence of the Big Horn and Little Bighorn rivers and established the current boundaries of the reservation.

The modern history of the Crows began with the establishment of Crow Agency, the reservation headquarters, in 1884. Created by government edict and comprised originally of Indian Office

buildings and a school, Crow Agency gradually became the social and political center of tribal life. In the years before World War II, however, the size of the reservation and the difficulty of travel there meant that it remained a rural community divided into distinctive "districts." The Crows' lands were home to three major divisions of the tribe.

For most of their history, the River Crows had lived north of the Yellowstone, relocating south of the only during the 1880s when the construction of the Northern Pacific railroad and the establishment of several Montana agencies forced them to settle alongside their kinsmen. For this reason most of the River Crows camped (and later settled) along the northern border of the reservation, primarily on the lower reaches of the Big Horn river in the Black Lodge district. The Mountain Crows, who earlier in the century had split their time between the Big Horn valley and the Wind River country, occupied the western portion of the reserve, divided between the Pryor district (along Pryor creek) and the upper end of the Big Horn valley. The Kicked In The Bellies, a smaller and more recent division, tended to concentrate along the upper Little Bighorn at Lodge Grass and in the area around Crow Agency. Other districts also emerged north of Crow Agency (Reno) and south of Lodge Grass (Wyola).

District life generally centered around a mission or government agency. Pryor and Lodge Grass maintained both Indian Office subagencies and schools, while the Big Horn supported St. Xavier mission (founded by Jesuits in 1886) as well as another

subagency. Beginning at about the turn of the century, small Protestant missions also established themselves at various points. The most successful of these were the Baptist mission at Lodge Grass and a Congregational (later Baptist) church at Crow Agency. Despite the presence of these outside institutions, however, each district supported one or more "headmen," chiefs who either led the original band to the area or who emerged during the early reservation period as an effective spokesperson and organizer. Among these men were Plenty Coups at Pryor, Pretty Eagle at Big Horn, Two Leggings at Black Lodge and Medicine Crow at Lodge Grass. Each district also generally maintained a ceremonial life which would include the activities of the Tobacco society, the hand game, arrow throwing and social dances.

Buffalo disappeared from the Yellowstone valley in 1883, the same year the Northern Pacific completed construction of its tracks through nearby Billings. Tribal subsistence therefore shifted from hunting and gathering to a mixed strategy of gardening, cattle raising, small game hunting and seasonal gathering. Groups of Crows gathered berries in the mountains each summer and hunted for game, but most people were forced to engage in a cash economy. They raised hay for sale to white cattlemen, chopped wood, maintained small farms that produced oats, wheat and corn, and grazed their cattle on the prairies and table lands. Various attempts to create tribal enterprises such as large-scale farming or a communal cattle herd were

unsuccessful. Increasingly in the twentieth century, Crows found work as unskilled laborers on white-owned ranches or in nearby Hardin and Billings. By the 1920s, the tribal economy had been reduced to a struggle for individual survival.

HOPI

The Hopi have occupied the area of their current reservation for at least the last 1,500 years. Their villages are located on a series of finger-like projections from the southwest edge of Black Mesa in north central Arizona. These extensions are designated First, Second, and Third mesas. The Hopi formerly occupied Antelope Mesa just to the southeast of the others, but these villages were largely abandoned by the time of Spanish contact in the seventeenth century. The Hopi lived in nucleated villages and practiced dry-farming.

Their remote location, coupled with a lack of valuable natural resources, contributed to a general pattern of isolation. The Spanish established a mission at Awatovi, on Antelope Mesa, in 1629, and subsequently at Oraibi and Shongopavi. The Hopi participated in the Pueblo Revolt of 1680, expelling or killing all the Spaniards in their area, including the priests. At this time, the Hopis moved their villages from the springs on the lower terraces to the mesa tops. The Spanish reconquest in the 1690s had little effect beyond formal capitulation to the authorities. Only Awatovi returned to Christianity at this time. In 1700-1701, the other Hopi villages united to destroy Awatovi,

reportedly killing all the men and capturing the women and children. Antelope Mesa was never reoccupied. A number of recalcitrants from other Pueblos joined the Hopi after the reconquest and some were incorporated among them. After the destruction of Awatovi there was little contact or interaction between the Hopi and Europeans until the advent of American control of the Southwest in 1849.

When the Americans gained title to the Southwest following the Mexican War, Hopi contacts with Euro-Americans increased. The village of Sichamovi was abandoned in the 1860s and subsequently re-established by emigrants from Zuni. Increased white settlement and the construction of railroads brought increasing numbers of Americans and others into the Hopi country. The United States government established an agency at Keams Canyon in 1874. The Moravians established a mission at Oraibi in 1870 and were followed by the Mormons at Moenkopi and Baptists at Mishongnovi in 1875. A rectangular reservation, 55 miles by 70 miles, was established in 1882 by executive order. Moqui Boarding School was established at Keams Canyon in 1887 and day schools were established at Polacca, Oraibi, and Toreva in the 1890s. Additional day schools were established at Shongopavi and Bacabi after 1910. The Baptists won some converts at Polacca by 1907 and the Mennonites established a mission at Oraibi in 1893.

Neither the schools nor the missions had much success, but provided a conduit for foreign ideas into Hopi. During this time internal dissension increased, culminating in the split at Oraibi

in 1906. Prior to this time, Oraibi was the largest and dominant village among the Hopi. Tensions between conservatives and progressives escalated to the point where the former left Oraibi to establish Hotevilla in 1906. Additional conflicts among the conservatives led to the establishment of Bacabi the following year.

Despite increased contacts and the permanent presence of Euro-Americans, the Hopi remained largely insular and conservative until 1940. Relatively few Hopis married people from outside their communities and only a few ever converted to Christianity. As a result, the religious syncretism characteristic of the Rio Grande Pueblos never developed among them. While individuals and villages differed to some extent, most Hopis showed little interest in formal education. Despite rather high enlistment levels for other American Indian groups, only about one-tenth of the Hopi men served in World War I.

WHITE EARTH

White Earth Reservation was established by a treaty between the United States and the Mississippi bands of the Minnesota Chippewa in 1867. It is located in north-central Minnesota in the Red River Valley and spans an ecotonal zone with tall grass prairies in the western portion, coniferus forests in the eastern portion, and a central zone of mixed deciduous forest and parklands.

The initial relocation of Indians from the headwaters of the

Mississippi River to the new reservation began in 1868 and continued through the 1870s. Most early immigrants belonged to the Mississippi and Gull Lake bands. In the mid-1870s, members of the Pembina and Otter Tail Pillager bands joined them and another township was added to the reservation to accomodate the former group. The population of the reservation increased from 550 in 1872 to 1,427 in 1876.

The 1889 Nelson Act, a revision of the Dawes Severalty Act, provided for the removal of all Minnesota Chippewa, except for the Red Lake Band, to White earth Reservation and the establishment of the Minnesota Chippewa Fund which consolidated the financial obligations of the federal government to all Minnesota Chippewas. Immigration to the reservation peaked in 1891 and again in 1893-1894. Due largely to these migrations, the population of the reservation doubled between 1890 and 1920.

Under the provisions of the Nelson and Dawes Acts, allotments to individual Indians began in 1891 and continued until 1899, when the Chippewa Commision, which had been created to oversee the process, was disbanded. In 1904 Congress authorized additional allotments to accomodate White Earth children born since 1899. This last round of land distributions reduced the acreages available to non-Indians and increased the pressure on property owned by Native Americans

Differences in social, cultural, and economic orientation marked the various bands on White Earth. In the nineteenth century members of the original Mississippi, Pembina, and Otter

Tail Pillager bands had played a central role in the fur trade, many acting as "go-betweens" who bridged the gap between Indian trappers and and white merchants. Many members of these bands were descendants of European fur traders and Chippewa women, a group generally called "Meti" in modern Canada. These people were actively engaged in commerce and wage labor and even farming. Members of other bands followed a more traditional seasonal round of hunting, fishing, and gathering wild plant foods. Their catch was used for food as well as to generate cash in the open market.

There were also religious and educational differences between these major groups on the reservation. Many of the people of mixed ancestry were Catholic and well educated. Most of the 'full-bloods' (who were more inclined to the traditional subsistence economy) either belonged to the native Midewiwin religion or to the Episcopal church.

Each band established its own communities and maintained its existing social ties on the reservation. The mixed-blood Mississippi and Pembina bands concentrated in the western prairies and around the agency at White Earth Village. These locations provided greater access to wage labor and to prime farm lands. The bands interested in subsistence grouped themselves in the eastern parklands with their diverse natural resources and abundant small lakes. These groups were often referred to as "mixed-bloods" and "traditionalists" and as time went on they had relatively little to do with each other.

II. COLLECTING AND PROCESSING THE DATA

The Staff of the American Indian Family History Project entered the census data using DbaseIV, typing in the data as closely as possible to how it appeared on the manuscript forms. Later, all character variables--except names, a miscellaneous category called OTHER, and occasionally other variables--were assigned numeric codes.

To check the accuracy of the entered data, we proofread the numeric variables--age, year of birth, number of years married, children ever born, children still surviving. Variables in character form were checked for typographical errors and inconsistencies, and the manuscript form was checked when the true answer could not be figured out from the data as entered. While we probably did not catch all the errors we caused, the data was carefully checked for errors.

There are clear errors on the manuscript forms (most noticeably, age and birthyear, available in the 1900 census, are frequently off by ten years). We left most enumerator's mistakes as is rather than trying to figure out the right answer. We believed our actions would only introduce additional biases into the data.

We constructed some variables as we entered the data: FAMSIZE (number of individuals in the household), NAMETYPE (whether the name appears to be European or Indian), and

occasionally others. We also constructed new variables later using fortran programs. Both types of created variables are identified in the discussion below as "constructed."

General

Features common to all or most of the data sets will be defined and described in this section. First, however, some general comments. Enumerators/agents had their own way of doing things, even when they were given instructions. They also made mistakes. For instance, numbers they assigned to people (DWELNO and FAMNO for 1900 and 1910 federal, NUMBER for 1930 BIA) are not always in orderly sequence. Some of the descriptions below include short descriptions of particularly problematic enumerators. Generally, certain variables were treated quite unevenly. These included birthmonth, occupation, schooling, whether living on a farm, "degree of white blood", allotment, polygamy, and whether the subject was taxed or not. Occupation in particular seemed to vary with the enumerator. Some enumerators, for example left the category blank, others called all everyone (even infants) farmers, others only asked household heads for their occupation, while still others elicited detailed (and apparently accurate) answers. Enumerators also did not always limit their questions to the age and sex groups listed in the instructions. For instance, if a child under 10 had information on literacy in the 1900/1910 censuses we recorded the information even though, according to the 1900/1910 rules, that child was not

part of the population at risk. Each of the 1900 and 1910 censuses with more than one enumerator has a variable for enumerator.

Each census applies to a universe of individuals. This universe is the population at risk of having information, and in the descriptions of the variables and codes, we describe the population at risk for each variable. In variables that exist on the census form, the universe refers to the population at risk as established in the enumeration instructions. (Not all enumerators obeyed the instructions, of course.) For constructed variables, the universe sometimes depends on a status determined by some other variables (e.g., information on spouse's race can only be linked to those people with spouses present in the family/household and so the universe for this constructed variable is people who are enumerated as "married spouse present")

Unless otherwise stated in the description of individual variables or censuses, the universe for each enumeration is all individuals in the population. The following section describes all of the variables in the data sets and defines the coded values for each.

CODES USED IN RECORDING CENSUS DATA

ADDRESS -

Available: 1900 and 1910

NOTE: usually missing

AGE -

Available: ALL

NOTE: Everyone 98 or older was coded as 98. The 1900 federal census form asked for year of birth as well as age, and the census checkers who looked the manuscript over in Washington appear to have occasionally corrected age to make it compatible with year of birth. We tried when possible to record the age as originally marked by the enumerator. Still, there are some birthyears and ages that do not add up to 1900 (or 1899) in the 1900 data sets.

98 98+

99 missing

ALLOTNO - allotment number

Available: Crow 1886, all 1930 except Hopi

Missing: 9999

ALLOTYR - year of receiving allotment

Available: 1910

9997 yes, received an allotment

9998 no, never allotted

9999 missing

ANNUITNO - annuity number

Available: Crow

Character variable.

Missing: N

ATJURIS - whether residing where enrolled

Available: 1930 BIA

BAND -

Available: 1885 (except Crow), 1900 White Earth, 1930 Hopi and White Earth

NOTE: Band is available on some BIA censuses since families were often grouped according to their band. For the 1900 federal White Earth census we looked for people on the 1900 BIA census and added BAND on the 1900 federal data set for those people identified on both censuses. Neither the BIA nor the census bureau defined what a band was. Some (such as those at White Earth) were formally recognized; others were not.

BIRTHMO - month of birth

Available: 1900

1 January	5 May	10 Oct
2 February	6 June	11 Nov
3 March	7 July	12 Dec
4 April	8 Aug	99 missing
	9 Sept	

BIRTHYR - year of birth

Available: 1900

Missing: 9999

BBLOOD - See WBLOOD

BPLACE, FBPLACE, MBPLACE - birthplace, father's birthplace,
mother's birthplace

Available: 1900 and 1910

1 Alabama	29 Nevada	56 English
2 Alaska	30 New Hampshire	Canada
3 Arizona	31 New Jersey	57 French Canada
4 Arkansas	32 New Mexico	58 Mexico
5 California	33 New York	60 Europe
6 Colorado	34 North	61 England
7 Connecticut	Carolina	62 Ireland
8 Delaware	35 North Dakota	63 Scotland
9 Wash.D.C.	36 Ohio	64 Wales
10 Florida	37 Oklahoma	65 France
11 Georgia	38 Oregon	66 Holland
12 Hawaii	39 Pennsylvania	67 Norway
13 Idaho	40 Rhode Island	68 Sweden
14 Illinois	41 South	69 Denmark
15 Indiana	Carolina	70 Germany
16 Iowa	42 South Dakota	71 Bavaria
17 Kansas	43 Tennessee	72 Prussia
18 Kentucky	44 Texas	73 Austria
19 Louisiana	45 Utah	74 Switzerland
20 Maine	46 Vermont	75 Italy
21 Maryland	47 Virginia	76 Greece
22 Massachusetts	48 Washington	77 Russia
23 Michigan	49 West Virginia	78 Turkey
24 Minnesota	50 Wisconsin	79 China
25 Mississippi	51 Wyoming	80 Africa
26 Missouri	52 Indian	97 at sea
27 Montana	Territory	98 unknown
28 Nebraska	53 U.S.	99 missing
	55 Canada	

CHALIVE - Number of children still surviving (asked of women)

Available: 1900 and 1910

Missing: 9

CHBORN - Number of children ever born (asked of women)

Available: 1900 and 1910

Missing: 99

CHCODE - Data quality flag for CHBORN and CHALIVE variables

NOTE: The 1900 census had some dubious values for the questions about the number of children ever born and children still alive. We think that the forms were gone over in Washington when the enumerator had left these columns blank since the handwriting and pen used were sometimes radically different. CHCODE is a data quality flag. It is recommended that in using the CHBORN and CHALIVE variables, you select for those women with a CHCODE of "1".

Available: 1900

1 Values under CHBORN and CHALIVE look consistent with enumerator's handwriting and pen/pencil.

2 Does not look original

9 Inapplicable (no values under CHBORN and CHALIVE)

CHIEF - whether individual is listed as a chief

Available: WHITE EARTH 1885

Missing: none

CITALLOT - how was citizenship attained?

Available: 1900

1 by allotment

2 not by allotment

3 immigration/naturalization (taken from question located elsewhere on the form, which since it was only for immigrants we did not include as a separate variable)

9 missing

CITYEAR - year of attaining citizenship

Available: 1900

9998 not a citizen

9999 missing

COUNTY - County where residing if off reservation

Available: 1930

Character variable

DIEDAGE - age of individual when he/she died

Available: Crow 1885

Constructed (from marginal comments).

Missing: 99

DIEDDATE - month & day of individual's death

Available: Crow 1885

Character variable. Constructed (from marginal comments).

Missing: N

DIEDYR - Year of death
Available: CROW 1885
Constructed (from marginal comments).
Missing: 9999

DWELNO - number of dwelling as it appears on the sheet
Available: 1900 and 1910
Missing: 999

DWELSIZE - Number of households in the dwelling
Available: 1900 and 1910
Missing: 9

DWELTYPE - type of dwelling
Available: 1900 and 1910

1900 census

1 fixed
2 movable
9 missing

1910 census

1 civilized
2 aboriginal
9 missing

EMPMOS - months in past year spent unemployed (those with an occupation listed)
Available: 1900

EMPSTAT - employment status (those with an occupation listed)
Available: 1910

1 Employer	3 Worker
2 working on own account	9 missing

ENUM - See individual censuses

EXT - whether household is extended

Available: 1900 and 1910

- 0 family of head consists of head and/or spouse and/or their children of all sorts (natural, step, adopted, wards)
- 1 family of head is vertically extended
- 2 family of head is laterally extended
- 3 family of head is both vertically and laterally extended
- 8 person is a nonrelative of head (boarder or servant) and should not be considered part of the head's family, whether nuclear or extended
- 9 missing (somebody in household has RELATION missing)

FAMILY -

NOTE: We do not know how agents went about compiling the early BIA censuses. Although people are grouped in families, it is not clear what a family is. Agents probably used their own criteria for grouping people. The Hopi agent mentioned going from house to house to collect his data for the first census (1885) and in that census the Hopi have fairly complicated "families." However, the 1885 Colville listing

seems to contain small families, and the agent, perhaps using criteria familiar from annuity distributions, may have grouped people in nuclear units, subunits of households but which were called "families." The 1930 BIA census form gives instructions to agents in which a family is said to be "composed of the following members":

1. Both parents and their unmarried children, if any, living with them; all other relatives and persons living with the family who do not constitute another family group.

2. Either parent and the unmarried children, if the other parent is dead; all other relatives and persons living with the family who do not constitute another family group.

3. A single person over 21 years of age, not living with a relative.

Although there are instructions available for 1930, the variability of the censuses across time and place suggest that agents often grouped people using their own, unstated criteria. Although agents' procedures for listing tribal members varied, the BIA censuses generally excluded whites and other Indians from these tribal listings. Even according to BIA definitions of families, these "families" are not necessarily complete. This problem is most apparent in the White Earth 1930 census where intermarriage with whites was common and where everyone was grouped with the band they were born into. (Married couples from different bands appear to have been listed separately, the children presumably listed with only one of their parents. Often, children were listed by themselves perhaps because they lived with a white parent and their Indian parent had died.)

Federal censuses (1900, 1910) break people into "families", which was defined in the enumerator instructions as essentially people who sleep and eat together, what modern usage calls a household. In distinguishing between BIA and federal censuses, it is perhaps to think of the BIA groupings as families vaguely defined and federal census groupings as households.

Available: ALL

FAMNO - Number of household as it appears on the sheet

Available: 1900 and 1910

NOTE: For an accurate list of households in sequence, use the constructed variable HHNO
999 missing

FAMSIZE - Number of individuals in the family/household

Available: ALL

FARM - whether household head had a farm schedule filled out

Available: 1900 & 1910

1 farm

3 tent

2 house

9 missing

FBPLACE - See BPLACE

FKEY - See KEYS

FTRIBE - See TRIBE

GRAD - Individual is a graduate of what institution?

Available: 1910

1 Carlisle	32 Weloka	57 Girls H. S.,
2 Haskell	Mission	Philadelphia
3 Hampton	33 Nuyoka	58 Fays, NJ
4 Sherman Inst,	Mission	60 Montecello
Riverside CA	34 Wetumka	Seminary
5 Chilocco	Mission	61 Mary Allen
Indian Sch.,	35 Pecan Creek	Seminary, TX
Kansas	Mission	62 St. Joseph's
6 Genoa,	36 Muskogee	Academy, St.
Nebraska	Mission	Paul MN
7 Tomah Indian	37 Tallahassee	63 Seabury
School, WI	Mission	Divinity Sch.
10 Pierre Indian	38 Langston	70 National
School, SD	Mission	Business
11 Morris Indian	39 Euchee	College
School, MN	Mission	71 Commercial
12 Pipestone	40 William	Canada
Indian Sch.,	Jewell	80 Indian
MN	Mission	University,
14 Chemawa	41 Howard Payne	Bacone OK
Training Sch.	Mission	81 Tecumseh
15 Fort Spokane	42 Riggs	College
16 Industrial	Institute,	82 Emporia
Indian Sch.,	Flandreau SD	Normal
17 Phoenix	43 St. Benedict	83 Howard Law
Indian Sch.	Mission	School
18 Moqui Indian	44 Colville	84 St. Louis
School	Mission Sch.	School of
19 Grand	45 Omak Mission	Pharmacy
Junction	46 S.C. Mission	85 Fallis Texas
Indian School	School	University
20 Torenno Day	47 Mission Sch.	86 Baptist
School	50 Territory	University of
21 Santa Fe	School	Missouri
Indian School	51 Sadelia,	87 St. Johns
25 Government	Missouri	College, MN
School	52 Eufaula, OK	88 Agric. Sch.,
26 Fort Shaw	53 Liberty Hill,	Univ. of
Industrial	TX	Minnesota
School	54 Common School	89 State
30 Mission	55 Public School	University of
School	56 Shanns High	Kansas
31 Initunka	School, WI	98 None
Mission		99 Missing

HHNO - Sequential number for household/family in the data set
Available: all data sets

HHREL - See RELATION.
Available: 1885 and 1886 censuses

IBLOOD - See WBLOOD

INDSUPP - Type of census sheet individual is listed on

NOTE: For the federal censuses, we entered all individuals listed on the special Indian forms. Many Indians in the Creek censuses were listed on the regular forms, however. For Creek 1900, 1910 and White Earth 1910, we looked for Indians on the regular forms as well. We entered all the dwellings on the regular form that included at least one Indian, and used the codes "1" for individuals on the Indian forms and "2" for individuals on the regular form. These individuals on the regular forms do not have responses to the supplemental Indian questions such as tribe.

RE Indians on regular census forms for Creek 1900, 1910, and White Earth 1910: Since many of the Indian people on the regular forms were boarders or lodgers in white or black families or in large boarding establishments, we took a shortcut. For Indians listed on the regular census forms who were boarders, hotel servants, or jail inmates, we did not enter the white or black proprietors or fellow-boarders. They were then assigned a FAMSIZE of 1 (unless they were listed with relatives) and were given a special relationship code: WBOARDER (living with a white family), BBOARDER (living with a black family), HBOARDER (living in a hotel or boarding-house), HSERVANT (servant in a hotel or boardinghouse), and JBOARDER (jail inmate). See the relationship listing for the numeric codes.

Indians owners of hotels or boarding houses were listed with all their boarders and servants regardless of race. Indian servants, unless working at a hotel or boardinghouse, were listed with the families they served, regardless of race.

Available: 1900 and 1910

- 1 individual is listed on Indian form
- 2 individual is listed on regular form

KEYS - fkey, mkey, spkey: location of father, mother and spouse in family/household

NOTE: These useful constructed variables (FKEY, MKEY, and SPKEY) provide keys to the position of each individual's father, mother, and spouse within the household. These variables locate relationships within the household and were the basis for creating other variables such as "spouse's race" with the fortran programs. The key refers to the position that relative is in within the household. If the head has no mother or father present in the household, the code is 98.

If his wife is the second person listed in the household, his SPKEY is 2. If the wife's father is not present but her mother is, FKEY is 98 and MKEY is 5, if her mother is the fifth person listed in the household. SPKEY is 1 since the wife's husband is the first person listed in the household. Sometimes a possible relationship was not clear on the form. In these cases of doubt, 99 (for missing) was entered. Also, to distinguish between biological and non-biological parents, 50 was added to the parents position. For men with more than one wife present in the family/household, the man's SPKEY was entered as 97, since there would only be room for one wife to be listed. The wives' SPKEY would usually still be 1 (or whatever the man's position was). Variables created by linking information with SPKEY do not add wives' information to polygamous husbands' records. This is an inaccuracy, but a slight one, since there are very few polygamous men evident in the data. These keys can also be used to determine whether an individual lives with his or her father, mother, and/or spouse.

Available: all censuses

98=no, 99=missing, all else= yes.

FKEY/MKEY

- 1 Individual's biological father/mother is first person listed in family/household
- 2 Individual's biological father/mother is second person listed
- 51 Individual's nonbiological parent (step/adopted) is first person listed in family/household
- 52 Individual's nonbiological parent is second person listed
- 98 Individual's father/mother is NOT present in family/household
- 99 Individual's father/mother is possibly present (unlikely but possible). There is not enough information to be sure.

SPKEY

- 1 Individual's spouse is first person listed
- 2 Individual's spouse is second person listed
- 97 Man is polygamous and has two or more wives present in the family/household
- 98 No spouse present
- 99 Possible spouse present

KIDS16 - Number of kids under 16 in family for BIA/household for Federal (attached to everyone's record)

Available: all data sets

0 none present

LANG - If individual cannot speak English, what language is spoken?

Available: 1910

1 Indian	8 Okanagan	70 Crow
2 Creek	9 Salishan	71 Sign
3 Choctaw	10 Siwash	72 None
4 Seminole	11 Chinook	98 English
5 Chickasaw	12 Hopi	99 blank (by
6 Chippewa	13 Tewa	implication
7 Colville	20 French	English)

MARSTA - marital status

Available: 1900, 1910, 1930

1 married, spouse present	5 single
2 married, spouse absent	6 separated
3 widowed	9 missing
4 divorced	

MBPLACE - See BPLACE

MKEY - See KEYS

MTRIBE - See TRIBE

MONTHS - Months old for those less than 1 year.

MORT - Is home mortgaged? (heads only)

Available: 1900 & 1910

1 owned in full
2 mortgaged
9 missing

NAME -

NOTE: Some BIA censuses have columns for Indian name and European name. In these cases, we NAME and ONAME. For the federal censuses and some of the 1885 BIA censuses, we used the variables NAME and NAMETYPE. The 1930 BIA censuses had two columns for name: surname and given name. By 1930, most Indians followed the Euroamerican pattern of a surname and given name. Those with only one, Indian name were entered under GIVENAME. SURNAME for those people was typed as missing.

Available: ALL

NAME2 -

Available: 1900 and 1910

NOTE: was asked on 1900, was sometimes optionally provided by enumerator in 1910 and some BIAs)

NAMETYPE - whether name is of European or Indian origin

NOTE: NAMETYPE is a classification we made (based on subjective judgement.) If the name seemed at all European, the code is "1"; "2" if the names seemed entirely of Indian origin. The 1900 census special Indian form had a space for a second name, and we followed a similar procedure (see the discussion of the 1900 federal census for more on this).

Available: 1900, 1910, some 1885 censuses

- 1 European influence
- 2 Indian
- 9 missing or not certain

NAME2TYP - Whether second name (if given) is Eur. or Indian

Available: 1900 and 1910, some 1885 censuses

- 1 European influence
- 2 Indian
- 3 same as first name
- 9 missing

NUMBER - Number assigned to individual by enumerator

Available: on some BIA censuses, see individual descriptions.

NUMCH5 - number of own kids under five present in family/house

Available: ALL

- 0 none present

NUMKIDS - number of own kids (any age) present in family/house

Available: ALL

- 0 none present

NUMMARR - Number of times married, asked of ever-married Indians

Available: 1910

- 9 missing/inapplicable

OCCUP - occupation

Available: 1900 and 1910

- | | |
|------------------------|-------------------------------|
| 0 - <u>NONE</u> | 50 - <u>FARMING/RANCHING</u> |
| 1 none, nothing | 50 farmer |
| 2 at home | 51 farm overseer |
| 3 own income | 52 farm laborer |
| 4 ration Indian | 53 farm laborer (home farm) |
| 5 pensioner | 54 farm laborer (working out) |
| 6 income from son | 60 stockman, owner, raiser |
| 10 retired farmer | 61 cattleman |
| 11 ex-teacher | 62 ranch manager |
| 12 retired minister | 63 cattle foreman |
| 20 at school, student | 64 stockherder, drover |
| 21 student at Carlisle | 65 cattleherder |
| 22 at college | 66 cowboy |
| 23 not at school | 67 sheepherder |
| 30 invalid | 68 sheep and horse herder |
| 31 idiot, half-witted | |

OCCUP (cont.)

- 70 horse dealer
- 71 stock dealer
- 72 cattle dealer
- 73 horse trainer
- 80 dairyman/woman
- 81 dairy laborer
- 100 - INDIAN LEADERSHIP/
TRADITIONAL OCCUPS
- 100 chief
- 101 council member, Creek
- 102 senator, Creek Council
- 103 Creek Nation employee
- 104 clerk, Creek Nation
- 105 auditor, Creek Nation
- 106 revenue inspector,
Creek N
- 110 hunter and trapper
- 111 hunter
- 112 trapper
- 113 fisherman
- 114 berrypicker
- 115 woodsman/guide
- 116 movable
- 120 silversmith
- 121 basketmaker
- 122 wool spinner
- 123 weaver
- 124 blanketweaver
- 125 pottery maker
- 130 gambler
- 131 prophet
- 140 - LOCAL GOVERNMENT
- 140 town commissioner
- 141 township assessor
- 142 street commissioner
- 143 notary public
- 144 city police
- 145 marshall
- 146 deputy marshall
- 147 fireman, town fire
dept.
- 150 - FEDERAL GOVERNMENT
- 150 employee
- 151 interpreter
- 152 clerk
- 153 janitor, Indian office
- 154 civil servant, Ind Serv
- 155 surveyor
- 160 Capt., Indian police
- 161 Indian policeman
- 162 deputy, U.S. Marshall
- 163 U.S. Jail Guard
- 164 U.S. Constable
- 170 soldier, U.S.N.G.
- 171 postmaster
- 172 assistant postmaster
- 173 mail carrier
- 174 contractor, U.S. Mail
- 175 enumerator
- 180 govt school employee
- 181 matron
- 182 asst matron
- 183 disciplinarian
- 184 teacher
- 185 industrial teacher
- 186 farmer
- 187 assistant farmer
- 188 stablekeeper
- 189 teamster
- 190 blacksmith
- 191 harnessmaker
- 192 seamstress
- 193 assistant seamstress
- 194 cook
- 195 night watchman
- 196 school janitor
- 197 matron, indigent home
- 198 janitor, indigent home
- 199 cook, indigent home
- 200 - PROFESSIONAL/
WHITE COLLAR
- 200 preacher
- 201 clergyman
- 202 Episcopal clergyman
- 203 minister
- 204 missionary
- 205 deacon
- 206 assistant rector
- 210 school superintendent
- 211 school matron
- 212 school teacher
- 213 music teacher
- 214 English teacher
- 215 superintendent,
orphanage
- 216 matron, orphanage
- 220 physician
- 221 nurse

OCCUP (cont.)

222 veterinarian	284 coachman
223 dentist	285 janitor
225 banker	290 prostitute
226 bank president	
227 bank bookkeeper	300 - <u>LABORERS (UNSKILLED)</u>
228 bank stenographer	300 laborer
229 bank cashier	301 day laborer
230 lawyer	302 odd jobs
231 engineer	
232 civil engineer	310 - <u>LABORERS</u>
233 electric engineer	<u>(SEMISKILLED)</u>
240 bookkeeper	310 prospector
241 assistant bookkeeper	311 gold miner
242 stenographer	312 quartz miner
243 clerk	313 coal miner
	314 miner
250 - <u>PROPRIETORS (hotels,</u>	315 oil refinery worker
<u>restaurants, etc.)</u>	316 woolen mill worker
250 hotel keeper	317 hostler/liveryman
251 boardinghouse keeper	
252 restaurant keeper	320 - <u>LABORERS (SKILLED)</u>
253 landlady/landlord	320 blacksmith
254 landowner	321 blacksmith apprentice
255 pool hall proprietor	322 harness maker
256 saloon proprietor	323 saddler
257 Broadway house keeper	324 house painter
	325 carpenter
260 - <u>SERVICE (hotels,</u>	326 tinsmith
<u>private families,</u>	327 cooper
<u>institutions)</u>	328 wagonmaker
260 servant	329 stone cutter, mason
261 servant, private family	330 plumber
262 servant, hotel	331 mechanic
263 servant, boarding house	332 surveyor
264 housekeeper	333 telephone lineman
265 general housework	334 telephone operator
266 housekeeper, hotel	335 telegram operator
267 chamber maid	336 photographer
270 hotel clerk	337 portrait man
271 hotel porter	338 carpetweaver
272 waiter, waitress	339 lacemaker
273 cook	340 jeweller
274 cook, private family	341 shoemaker
275 cook; bdghouse,	342 dressmaker
hotel, rest.	343 tailor, tailoress
276 cook, orphanage	344 seamstress
277 bartender	345 cleaner, laundry
280 laundress	346 barber
281 washwoman	
282 boot black	
283 gardener	

OCCUP (cont.)

400 - BUYERS, SELLERS, ETC.

400 capitalist
401 manufacturer
402 peddler
403 merchant
410 storekeeper
411 bakery proprietor
412 livery stable keeper
413 saddlery keeper
414 barber proprietor
415 grocer
416 market proprietor
417 drug store owner
420 contractor
421 cotton buyer
422 secondhand dealer
423 marble dealer
424 news dealer
425 hardware dealer
426 ice and coal dealer
427 poultry
428 fur dealer
429 sewing machine dealer
430 real estate dealer
431 real estate office
interpreter
432 insurance agent
433 collector
440 store manager
450 saleslady/man
451 store clerk
452 dry goods salesman/lady
453 grocery salesman
454 drugstore salesman
455 hardware salesman
456 meat market salesman
457 confectionary salesman
458 furniture salesman
459 clothing salesman
460 notions salesman

500 - TRANSPORTATION

500 teamster
501 stage driver
502 driver
503 drayman

504 deliveryman
505 porter
506 ferryman
507 steamboat pilot
508 house mover

550 - RAILROAD

550 laborer
551 section hand
552 brakeman
553 flagman
554 fireman
555 agent
556 depot operator
557 engineer
558 rr bridge carpenter
559 train conductor
560 switchman

600 - LUMBER INDUSTRY

600 lumberman
601 lumber dealer
602 logging contractor
603 lumber company manager
604 bookkeeper
605 woodsman, woodchopper
606 woodsawer
607 log driver, river
driver
608 sawmill laborer
609 sawmill engineer
610 sawmill fireman
611 sawmill miller
612 lumber teamster
613 cook, lumbercamp

700 - MISCELLANEOUS (CROW)

700 water carrier/ditch
701 plow holder/ditch
702 bronco rider
703 historian
704 maker of curios

OKID1, OKID2 - Age of own oldest child and own second oldest
child present in family/household

Available: all data sets

99 missing/inapplicable

OTHER - Miscellenous, see individual census descriptions

NOTE: there are specific codes applicable to the 1910 data sets:

1 thru 12 age in months for 0 year olds

20 served in Confederate Army

21 served in Union Army

30 deaf and dumb

31 blind and deaf

32 blind

immigrated to U.S. in:

50	1856	59	1879	68	1891
51	1860	60	1880	69	1892
52	1865	61	1881	70	1894
53	1866	62	1882	71	1895
54	1867	63	1885	72	1896
55	1870	64	1886	73	1898
56	1873	65	1887	74	1900
57	1875	66	1888	75	1901
58	1878	67	1890	76	1902

Year of getting second allotment

80	1881	85	1894	90	1899
81	1889	86	1895	91	1900
82	1890	87	1896	92	1902
83	1892	88	1897	93	1904
84	1893	89	1898	94	1905

other

90	husband is in jail	99	missing
----	-----------------------	----	---------

OTHERBIA - Some of the 1900 censuses were checked with the BIA censuses. Any additional information for linked individuals was put in OTHERBIA.

See individual census descriptions.

OWN - Whether household head owns home? (asked of heads)

Available: 1900 and 1910

1 own

2 rent

9 missing

PO - Post office if not on reservatio

Character variable

Available: 1930

POLYG - Whether living in polygamy, asked of currently married Indians

Available: 1900 and 1910

1 yes

2 no

3 yes, sororal polygamy (1910 only)

9 missing/inapplicable

RACE -

Available: 1900 and 1910

- | | |
|----------|-----------|
| 1 white | 5 mulatto |
| 2 black | 9 missing |
| 3 Indian | |

RATION - Whether Indian receives government rations

Available: 1900 and 1910

- 1 yes (R written in occupation column for 1900 & 1910 censuses)
- 2 no (no R written on the form)

READ - Can individual read?

Available: 1900 and 1910

- 1 yes
- 2 no
- 9 missing

RELATION, HHREL - relationship to head of household

NOTE: In the 1885 and 1886 BIA censuses, relationships were not described as relationship to head but were loosely defined relationships to people in the household. (A sample household might be HUSBAND, WIFE, SON, BABY, or MOTHER, DAU.) We included this information under the variable RELATION but to standardize the 1885 censuses with the other data sets, we constructed HHREL, relationship to head, based on the information provided for each family. In almost all situations, you will want to use HHREL instead of RELATION in the 1885 censuses.

The 1930 BIA censuses also do not have clear relationships. These families do not always begin with HEAD. (An Indian woman married to a white man would not be listed as head but probably as "wife," while the head of the family, being white, would not be listed.) Some of the 1930 censuses list detailed relationships to other people in the census (son of #142, for example), and so we did not assign numeric codes to the 1930 relationship column.

Available: 1885 (HHREL and RELATION) 1900, 1910, and 1930

(RELATION)

- | | |
|------------------------|-----------------------------------|
| 1 head | 21 stepmother/father |
| 2 wife, husband | 22 mother/father-in-law |
| 3 son, dau | 23 grandmother/father |
| 4 stepson/dau | 24 grandmother/father-in-law |
| 5 adopted son/dau | 25 great grandmother/father |
| 6 foster son/dau | 26 son/dau-in-law's mother/father |
| 7 ward | 30 brother, sister |
| 10 son/dau-in-law | 31 halfbrother/sister |
| 11 grandson/dau/child | 32 stepbrother/sister |
| 12 stepgrandson/dau | 33 brother/sister-in-law |
| 13 grandson/dau-in-law | |
| 14 great grandson/dau | |
| 20 mother, father | |

34 sister/brother-in-law's mother/father	74 JBOARDER - jail inmate (see INDSUPP)
40 aunt, uncle	75 servant
41 aunt/uncle-in-law	76 HSERVANT - servant in hotel (see INDSUPP)
42 nephew, niece	77 servant's family
43 nephew/niece-in-law	78 farm laborer, hired hand
44 great aunt/uncle	79 helper, nurse, employee
45 great nephew/niece	80 friend
50 cousin	81 partner, roommate, coworker
51 cousin-in-law	82 student
52 second cousin	83 visitor
<u>(60-66 Crow 1886 only)</u>	84 tramp
60 wife2	85 matron
61 adopted father/mother	86 assistant farmer, assistant rector
62 adopted father/mother -in-law	87 inmate
63 adopted grandfather/ mother	88 inmate's family
64 adopted granchild	89 no relationship to head, other nonrelative
65 adopted brother/sister	90 orphan
66 adopted brother/sister -in-law	91 baby
70 boarder, lodger	92 boy, girl
71 WBOARDER - boards w/white family (see INDSUPP)	93 man, woman
72 BBOARDER - boards w/black family (see INDSUPP)	94 single, bachelor, maiden
73 HBOARDER - boards in hotel (see INDSUPP)	95 widow, widower
	96 old man/woman
	97 queen mother
	98 illegible
	99 missing

REARRY - Did individual remarry after 1886-87?

Available: Crow 1886

Character variable. Constructed (from marginal comments).

Missing: 9

RESIDENT - Does individual reside on own lands?

Available: 1910

1 yes

2 no

9 missing

SCHOOL -

1900: how many months were spent in school in the past year?

1910: did this individual attend school since Sept 1, 1909?

1900:

1 thru 12

9 missing

Crow 1900

51 YES

52 NO

1910:

1 yes

2 no

9 missing

SEX -

NOTE: If we could impute sex (when missing) based on relationship terms and names, we did. If we had no clues as to sex, "9" was coded.

Available: ALL

- 1 Male
- 2 Female
- 9 missing

SPAGE - Spouse's age (married spouse present)

Available: ALL

Missing: 99

SPEAK - can individual speak English?

Available: 1900 (for 1910 see LANG)

- 1 yes -
- 2 no
- 9 missing

SPKEY - see KEYS

SPLANG - If spouse does not speak English, what language is spoken? see LANG (married spouse present)

Available: 1910

SPOCC - Spouse's occupation; see OCCUP (married spouse present)

Available: 1900 and 1910

SPSPEAK - can spouse speak English? see SPEAK (married spouse present)

Available: 1900

SPTRIBE - spouse's tribe or race. see TRIBE (married spouse present)

NOTE: tribe was often missing for non-Indians. For SPTRIBE, race of spouse is used if the spouse is non-Indian.

Available: 1900 and 1910

STATE - State where living if off reservation

Character variable

Available: all 1930 except Colville

STATUS - What was status of individual when the additions were made to the census

Available: Crow 1885

Character variable. Constructed (from marginal comments).

Missing: 9

SUBGROUP - town, village, band
see 1930 census descriptions.

TAXED - Is individual taxed? (heads)

Available: 1900 and 1910

- 1 yes
- 2 no
- 9 missing

TNUMBER - Txxx

NOTE: We do not know what the tnumber refers to--perhaps wills?

Available: Crow 1886

Character variable. Constructed (from marginal comments).

Missing: N

TOWN - See individual codebooks

Available: 1900 and 1910, Hopi in all years

TRIBE, FTRIBE, MTRIBE - tribe, father's tribe, mother's tribe

Available: 1900 and 1910

NOTE: The Hopi 1930 BIA also gives tribe but as a character variable that is not coded.

1 IROQUOIS	26 PALOUSE	51 NAVAJO
2 ONEIDA	27 UMATILLA	52 ZUNI
3 ONONDAGA	28 NEZPERCE	53 OAXACA
4 MUNSEE	29 SPOKANE	54 MISSOURI
5 STOCKBRI	30 COLVILLE	INDIAN
6 WYANDOT	31 COLUMBIA	55 IDAHO INDIAN
7 POTAWATI	32 OKANAGAN	56 MONTANA
8 SAC&FOX	33 L OKANAGON	INDIAN
9 MENOMINE	34 NESPELEM	57 MEXICAN
10 CHIPPEWA	35 SANPOIL	(INDIAN?)
11 SHAWNEE	36 METHOW	58 UNKNOWN
12 DELAWARE	37 KALISPEL	70 CROW
13 QUAPAW	38 WALLAWAL	71 GROS VENTRE
14 OSAGE	39 WENATCHE	72 PIEGAN
15 CATAWBA	40 KOOTENAI	73 ASSINIBOINE
16 CHEROKEE	41 YAKIMA	74 CHEYENNE
17 CHICKISAW	42 COEUR D'ALENE	75 CREE
18 CHOCTAW	43 WAPATO	76 ARAPAHO
19 SEMINOLE	44 CHINOOK	90 CHINESE
20 CREEK	45 FRAZER RIVER	91 CREEK NEGRO
21 MUSKOGEE	46 HOOPA	92 BLACK
22 EUCHEE	47 MAKUNA	93 MULATTO
23 SIOUX	48 PIMA	94 WHITE
24 BLACKFOOT	49 PIUTE	98 ILLEG
25 SNAKE	50 HOPI	99 MISSING

UNEMP - Was individual unemployed on April 15, 1910?

Available: 1910

- 1 yes
- 2 no
- 9 missing/inapplicable

UNEMPWKS - How many weeks was individual unemployed in past year?
Available: 1910
99 missing

WBLOOD, IBLOOD, BBLOOD - Degree of white blood, Indian blood,
black blood

Available: 1900 WBLOOD; 1910 - IBLOOD, WBLOOD, and BBLOOD

NOTE: Where black ancestry was written in for 1900, it was coded
as a number over 50. Codes 1 through 50 and the codes in
the 90s apply to the 1910 censuses. 1930 BIA instructed the
degree of Indian blood to be categorized as less than 1/4,
1/4 or more, and full.

1900/1910:

00 0	24 2/3
01 1/64	25 11/16
02 1/32	26 7/10
03 1/16	27 23/32
04 3/32	28 3/4
05 1/10	29 6/8
06 1/8	30 25/32
07 1/6	31 13/16
08 1/5	32 5/6
09 3/16	33 27/32
10 7/32	34 6/7
11 1/4	35 7/8
12 9/32	36 9/10
13 5/16	37 29/32
14 1/3	38 15/16
15 3/8	39 16/17
16 2/5	40 31/32
17 7/16	41 63/64
18 1/2	42 64/65
19 33/64	43 127/128
20 17/32	50 full
21 9/16	
22 3/5	
23 5/8	

1900 only:

50 1/4 B
51 1/2 B
52 3/5 B
53 5/8 B
54 3/4 B
55 13/16 B
56 7/8 B
57 15/16 B
58 31/32 B

1900/1910

80 black
90 white
98 unknown
99 missing

1930:

0 no Indian blood
1 less than 1/4
2 1/4 or more
3 mixed
4 full
9 missing

WRITE - Can individual write (any language)?
Available: 1900 and 1910
1 yes
2 no
9 missing

YKID - Age of own youngest child present in family/household
Constructed
Available: ALL
Missing: 99

YRSMARR - Number of years married to current spouse
Available: 1900 and 1910
Missing: 99

IV. THE INDIVIDUAL CENSUSES: PROFILES AND DATA SUMMARIES

The following descriptions present individual variations in each census and specific information on the enumeration of the five sample reservations.

1885

There are three 1885 data sets: Colville, Hopi, and White Earth. Columns 1-30 are identical for each data set. Beginning in column 31 are the character variables (INAME, ENAME, INAME, OTHER, etc.) which contain different types of variables for the three groups.

COLVILLE AGENCY CENSUS

These data come from National Archives Collection M595/Reel 49. Sidney Waters, Indian agent, was the enumerator. The date for the census collection is given as June 30th, 1885. However, the enumeration for Joseph's Band appears to have been sent in to Washington separately and later, probably in July. This 1885 census appears to cover all Indians under the Colville Agency jurisdiction, and so includes Indian groups belonging to the Spokane Reservation.

Number of cases: 1443

CREEK (There was no Creek Census conducted by the BIA in 1885)

CROW AGENCY CENSUS (1886-87)

These data come from a manuscript census in the Records of the Crow Agency at the Regional Branch of the National Archives in Seattle, Washington (Box 154, Item 17). Agent H.E. Williamson collected this census. It gives allotment numbers, name, relationship, and age of each individual. Also included are updates on marriage and death. It is not clear who added these updates, when and why. The latest date of death given was 1911, suggesting that the updates were made at around that time.

Number of cases: 2461

HOPI AGENCY CENSUS (1885)

These data come from National Archives Microfilm Collection M595, reel 272. John H. Bowman, agent at the Navajo Agency, collected the 1885 census data for the "Moquis Pueblos," and sent the census enumeration to the Indian Affairs Office on July 20, 1885. The inhabitants of Oraibi refused to cooperate. Bowman estimated their population to be 1050.

Number of Cases: 1088

WHITE EARTH AGENCY CENSUS (1885)

These data come from National Archives Collection M595, reel 649. The census forms don't say who enumerated for White Earth Agency, but Indian agent T.J. Sheehan probably did most of it.

The style of enumeration (e.g., the spellings of names and the addition of babies' ages in months) were different for Band #2 (Pembinas) than for the other bands, suggesting a different enumerator. The date for the census collection is given as June 30th, 1885. Seven bands were listed as within the jurisdiction of White Earth Agency in 1885. Only the three groups listed as LIVING at White Earth Reservation are in this data set.

Number of Cases: 1736

Columns for use with 1885 data sets.

1	(1) BAND	HOPI ONLY
2-4	(3) HHNO*	118-121 (4) NUMBER*
5-6	(2) FAMSIZE	
7-8	(2) RELATION	WHITE EARTH ONLY
9	(1) SEX	33-67 (35) NAME
10-11	(2) AGE	68-92 (25) ONNAME
12-13	(2) HHREL	93-107 (15) OTHER
14-15	(2) FKEY*	108 (1) CHIEF
16-17	(2) MKEY*	109 (1) NAMETYPE
18-19	(2) SPKEY*	
20-21	(2) SPAGE	CROW ONLY
22-23	(2) NUMKIDS	103 (1) STATUS
24-24	(1) NUMCH5	104 (1) REMARRD
25-26	(2) OKID1	105-108 (4) DIEDYR
27-28	(2) OKID2	109-115 (7) DIEDDATE*
29-30	(2) YKID	116-117 (2) DIEDAGE*
31-32	(2) KIDS16	118-124 (7) TNUMBER*
33-72	(40) NAME*	125-128 (4) ALLOTNO*
73-102	(30) ONAME*	129-220 (92) OTHER*
103-117	(15) OTHER*	

* Data not reported on frequency tables or charts

CODES 1885/6

BAND (not for Crow)

NOTE: Band was not assigned to individuals separately, but was how individuals were grouped.

Missing data: None

COLVILLE			FREQ	PCT	HOPI (Village)			FREQ	PCT
1	Coeur de Alenes		442	30.6	1	Tewa		146	13.4
2	Calispel		138	9.6	2	Sichomovi		120	11.0
3	Lake		295	20.4	3	Walpi		239	22.0
4	Deep Creek Colony		67	4.6	4	Mishongnovi		287	26.4
	("Spokane Indians not on reserve")				5	Shipaulovi		102	9.4
5	Lower Spokane Indians		351	24.3	6	Shongopavi		194	17.8
	("on Spokane Res.")								
6	Nez Perces, Joseph's Band		150	10.4					

WHITE EARTH

1	Otter Tail Pillagers	596	34.3
2	Pembina Indians	227	13.1
3	Mississippi Band	913	52.6

HHNO - number of family in order listed. Constructed.

NOTE: Crow - #338 is repeated; two families share that number)

Missing Data: none

FAMSIZE - # of indivs. in family. Constructed.

Missing data: none

VAL	COLVILLE		CROW		HOPI		WHITE EARTH	
	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
1	68	4.7	14	.6	5	.5	195	11.2
2	310	21.5	200	8.1	46	4.2	256	14.7
3	309	21.4	444	18.0	135	12.4	243	14.0
4	280	19.4	684	27.8	152	14.0	244	14.1
5	195	13.5	525	21.3	200	18.4	240	13.8
6	168	11.6	414	16.8	156	14.3	192	11.1
7	56	3.9	133	5.4	140	12.9	168	9.7
8	48	3.3	8	.3	160	14.7	104	6.0
9	9	.6	18	.7	63	5.8	63	3.6
10			10	.4	20	1.8	20	1.2
11			11	.4	11	1.0	11	.6

RELATION - relationship to other people in the family
Missing data: 99

VAL	COLVILLE		CROW		HOPI		WHITE EARTH	
	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
1							1	.1
2	702	48.6	444	18.0	78	7.2	487	28.1
3	551	38.2	746	30.3	501	46.0	831	47.9
4	3	.2	76	3.1	3	.3	9	.5
5			102	4.1			2	.1
10	4	.3	2	.1	31	2.8		
11			79	3.2	24	2.2	30	1.7
15			4	.2				
20	32	2.2	690	28.0	346	31.8	133	7.7
21			1	.0				
22			43	1.7	2	.2		
23	1	.1	9	.4	17	1.6	9	.5
24			5	.2				
30	5	.3	77	3.1	43	4.0	13	.7
31					1	.1		
33			49	2.0			2	.1
40			9	.4	8	.7	5	.3
41			8	.3				
42			49	2.0	23	2.1	13	.7
43			12	.5			1	.1
44			1	.0				
45			2	.1				
50			7	.3			2	.1
51			2	.1			1	.1
52			1	.0				
60	3	.2						
61			4	.2				
62			3	.1				
63			4	.2				
64			5	.2				
65			13	.5				
66			1	.0				
90	13	.9					5	.3
91	7	.5						
92	6	.4						
93	31	2.1			1	.1		
94	32	2.2			2	.2		
95	40	2.8			7	.6		
96					1	.1		
99	13	.9	13	.5			192	11.1

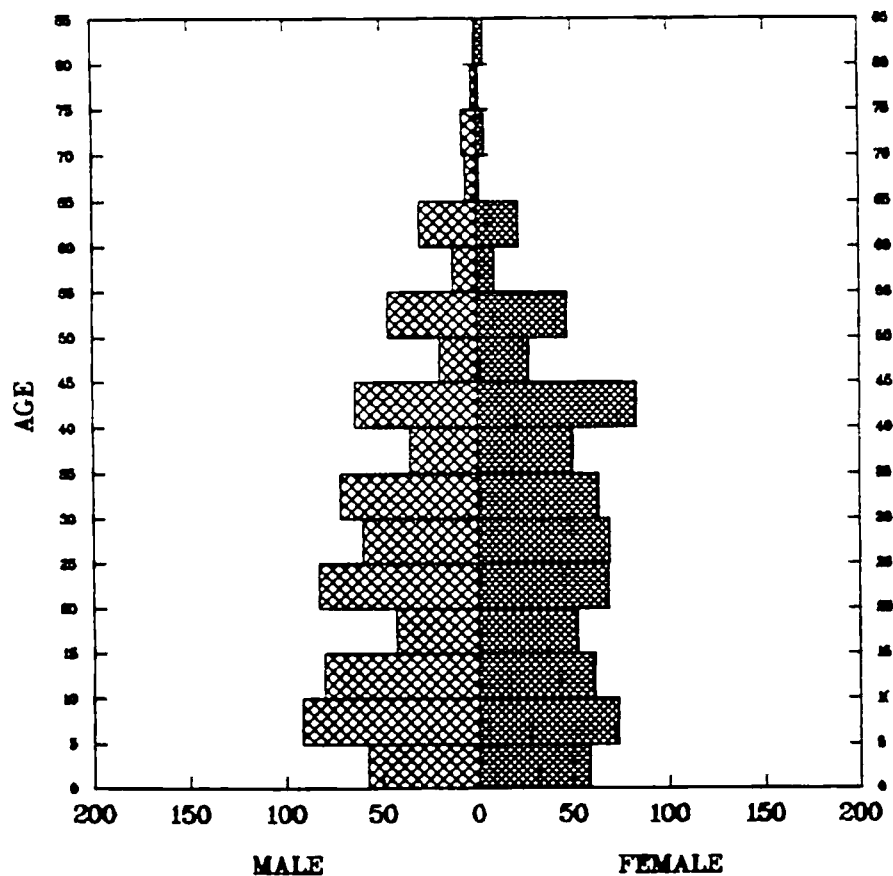
SEX - Constructed (from RELATION and ENAME).
 Missing data: 9

	COLVILLE		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
1	721	50.0	1133	46.0	603	55.4	877	50.5
2	701	48.6	1317	53.5	485	44.6	858	49.4
9	21	1.5	11	.4			1	.1

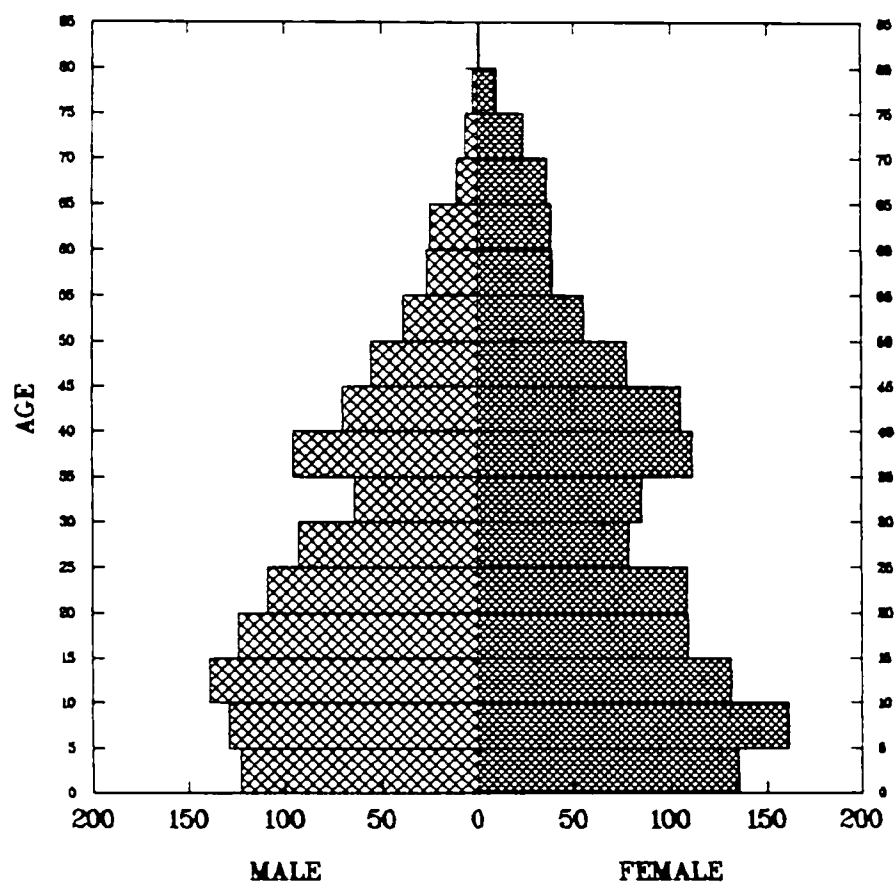
AGE
 Missing Data: 99

	COLVILLE	CROW	HOPI	WHITE EARTH
MISSING	10	30	1	5
MISS %	.7	1.2	.1	.3

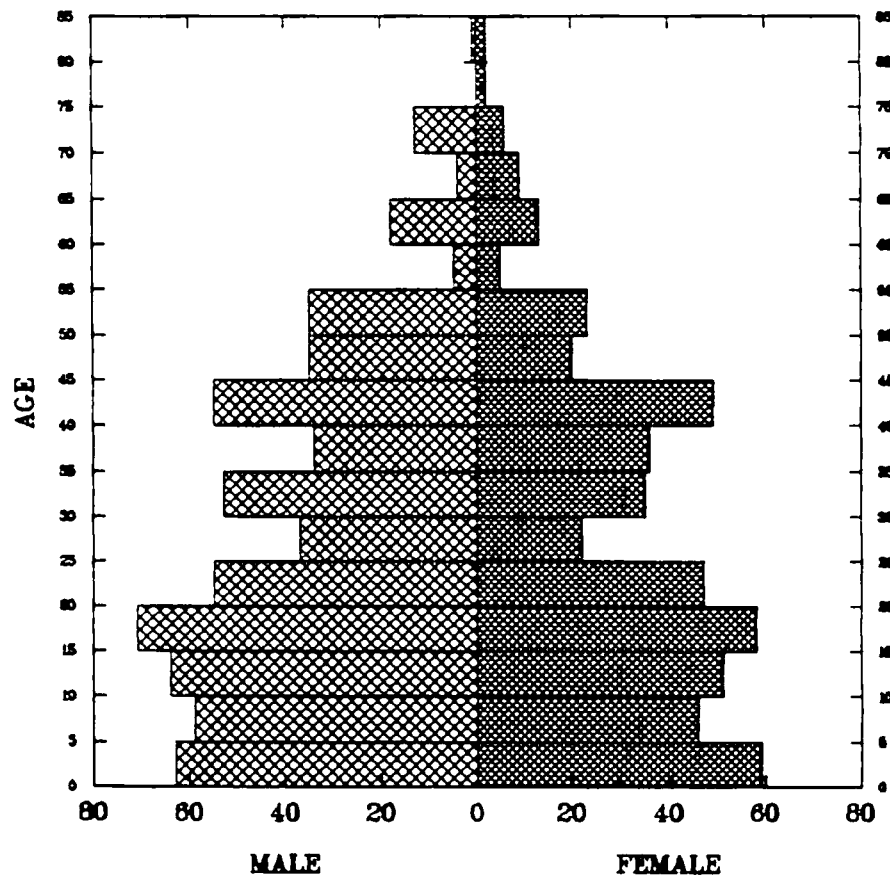
Age Structure, Colville, 1885



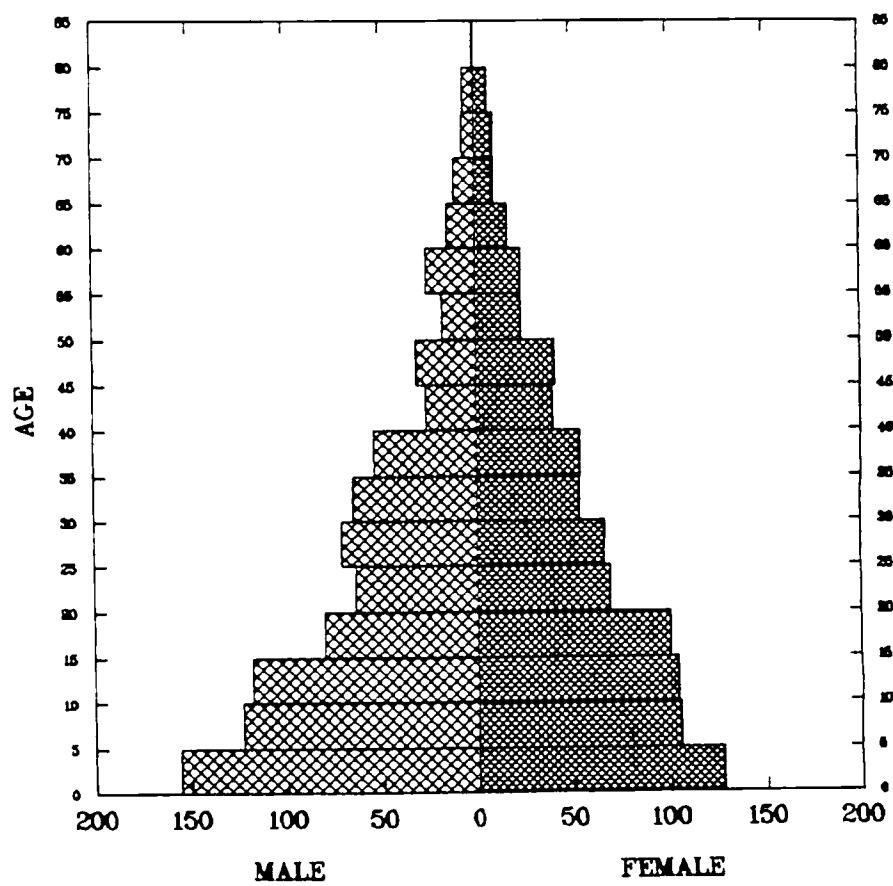
Age Structure, Crow, 1885



Age Structure, Hopi, 1885



Age Structure, White Earth, 1885



HHREL - relationship to head of family. Constructed (from
RELATION).
Missing Data: 99

VAL	COLVILLE		CROW		HOPI		WHITE EARTH	
	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
1	476	33.0	631	25.6	226	20.8	592	34.1
2	349	24.2	445	18.1	199	18.3	243	14.0
3	538	37.3	742	30.2	495	45.5	831	47.9
4	3	.2	76	3.1	3	.3	9	.5
5			101	4.1			2	.1
10	3	.2	2	.1	30	2.8		
11	3	.2	78	3.2	27	2.5	3	1.7
13	1	.1						
15			4	.2				
20	17	1.2	61	2.5	3	.3		
21			1	.0				
22			43	1.7	23	2.1		
23	1	.1	8	.3				
24			5	.2	3	.3		
30	7	.5	78	3.2	7	.6	9	.5
33	1	.1	49	2.0	36	3.3	2	.1
40			10	.4	1	.1		
41			9	.4	5	.5		
42	1	.1	47	1.9	19	1.7	13	.7
43			13	.5	4	.4	1	.1
44			1	.0				
45			2	.1	1	.1		
50			9	.4			2	.1
51			2	.1			1	.1
52			1	.0				
61			4	.2				
62			3	.1				
63			4	.2				
64			5	.2				
65			13	.5				
66			2	.1				
99	43	3.0	12	.5	6	.6	1	.1

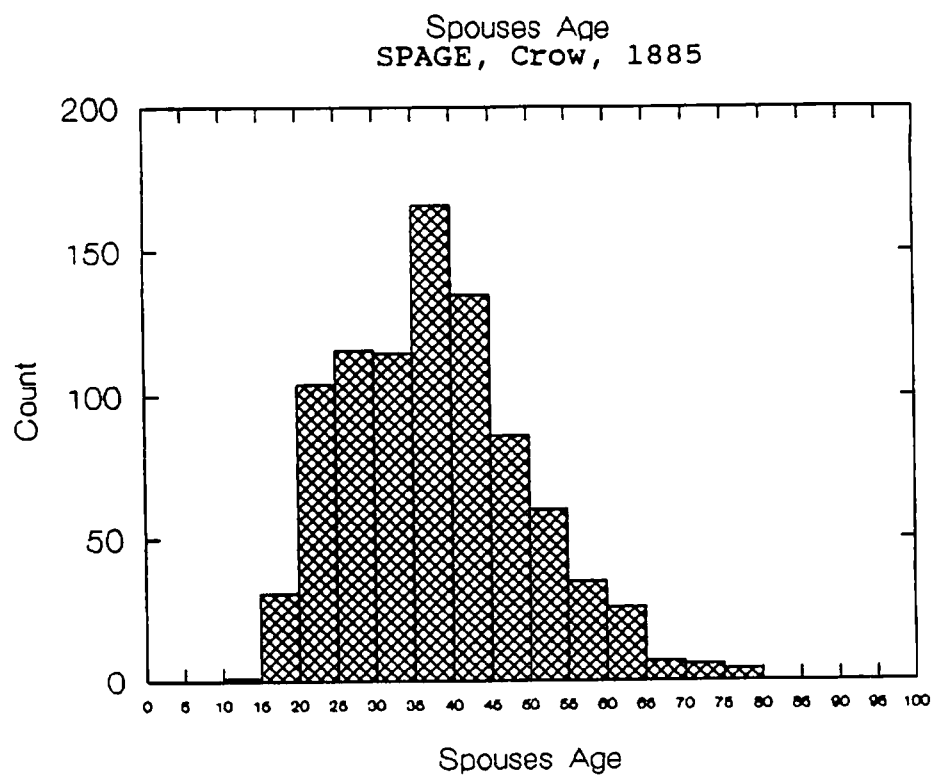
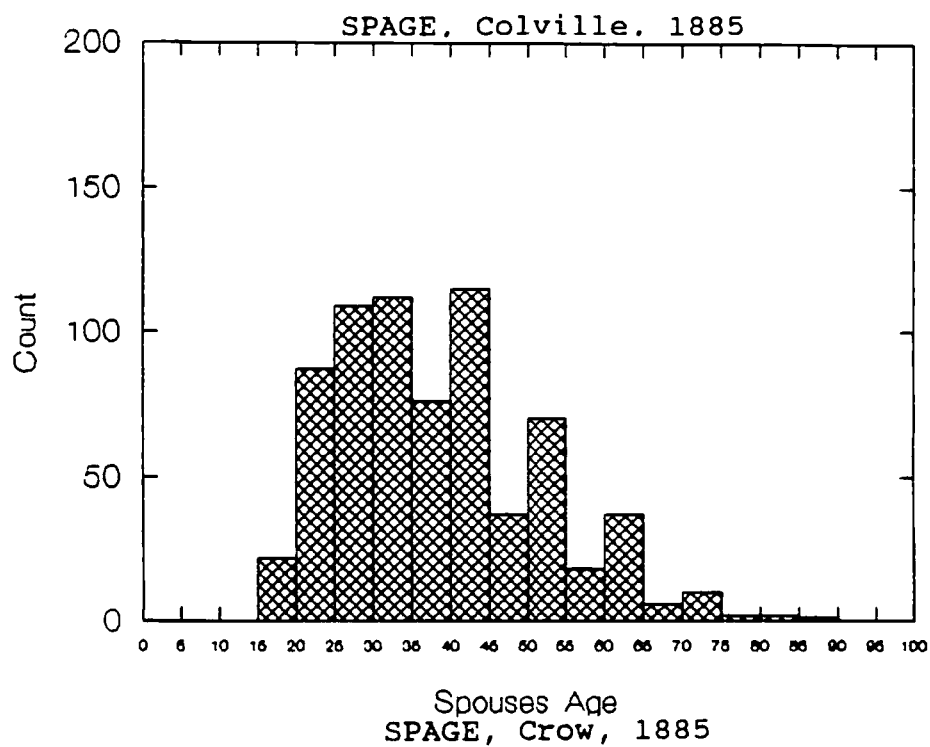
FKEY - position of individual's father in family. Constructed.
Missing Data: 99

MKEY - position of individual's mother in family. Constructed.
Missing Data: 99

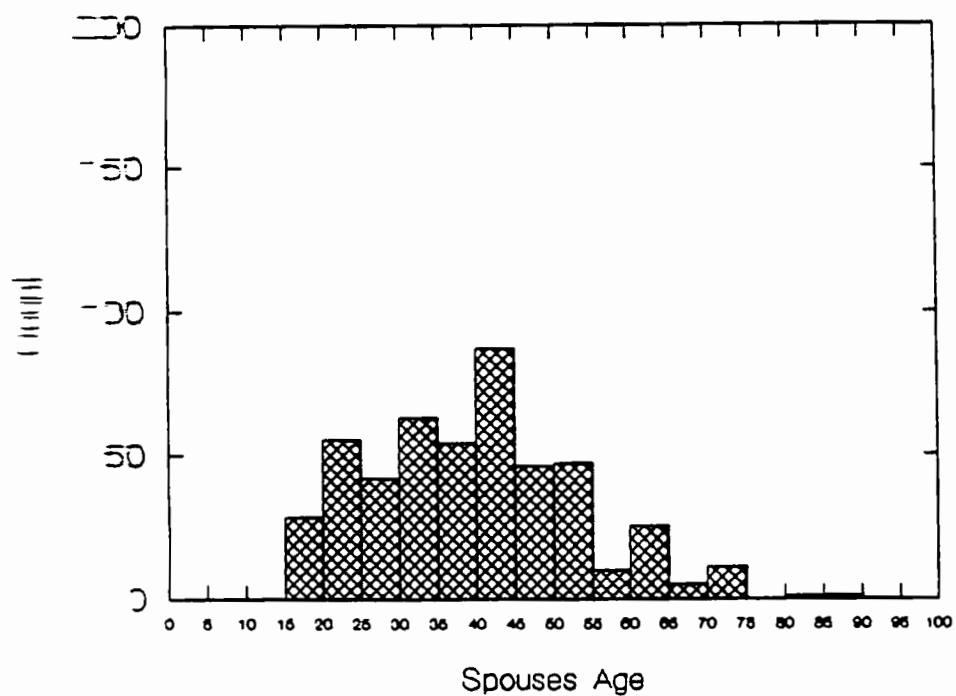
SPKEY - position of individual's spouse in family. Constructed.
Missing Data: 99

SPAGE - Spouse's age. Constructed.
 Missing data: 99 (for inapplicable and if spouse's age missing)

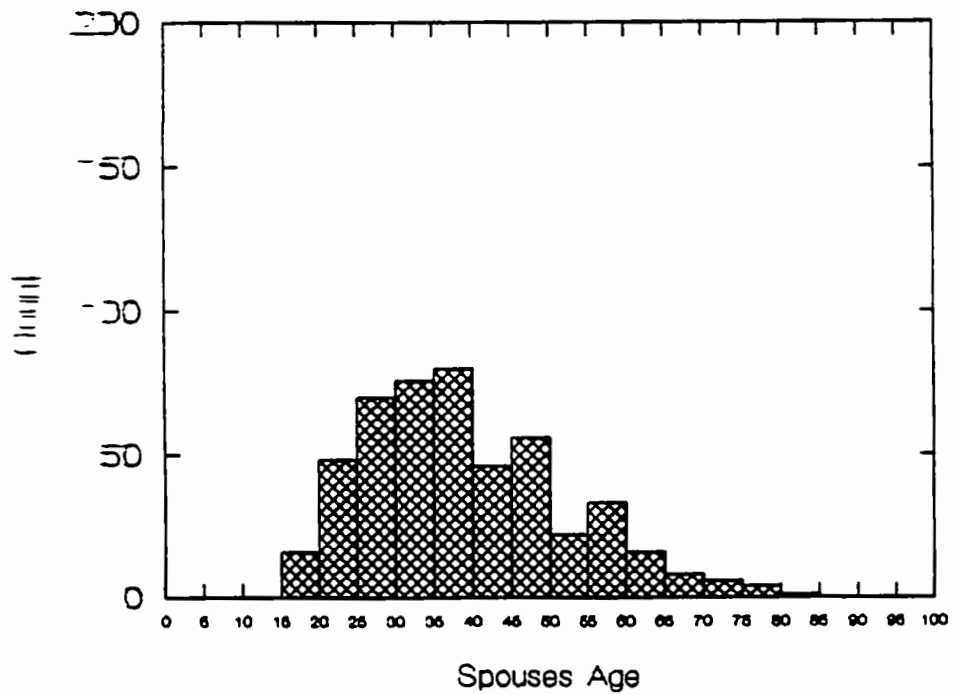
	COLVILLE	CROW	HOPI	WHITE EARTH
MISSING	739	1569	613	1245
MISS %	51.2	63.8	56.3	71.7



SPAGE, Hopi, 1885



SPAGE, White Earth, 1885



NUMKIDS - number of own kids in the family. Constructed.
Missing data: 99

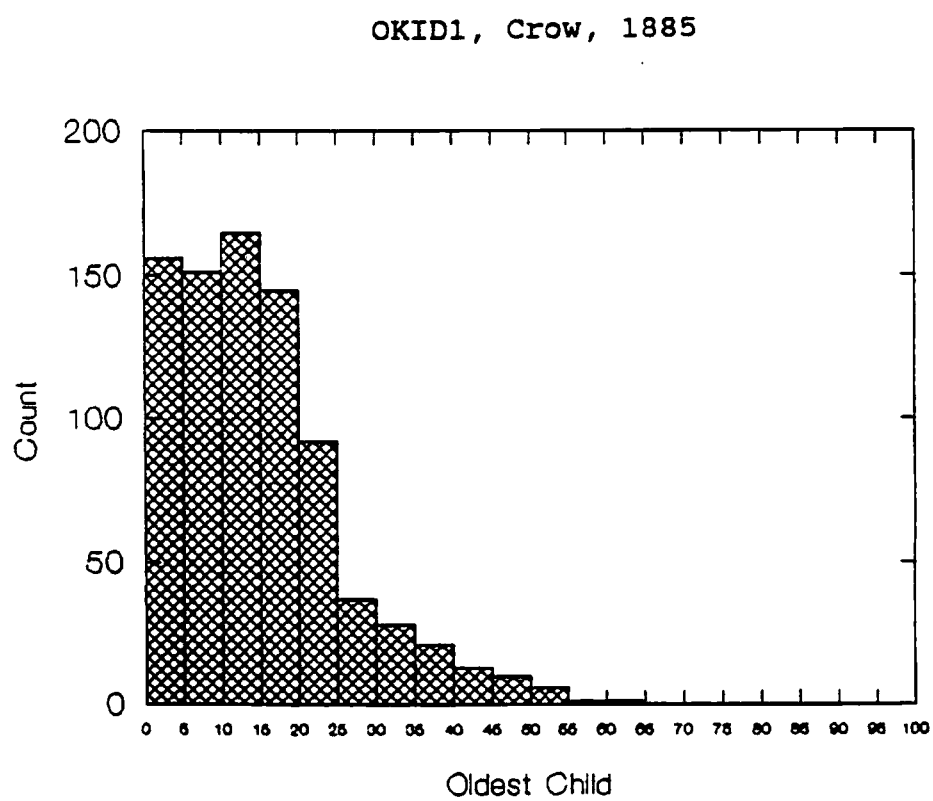
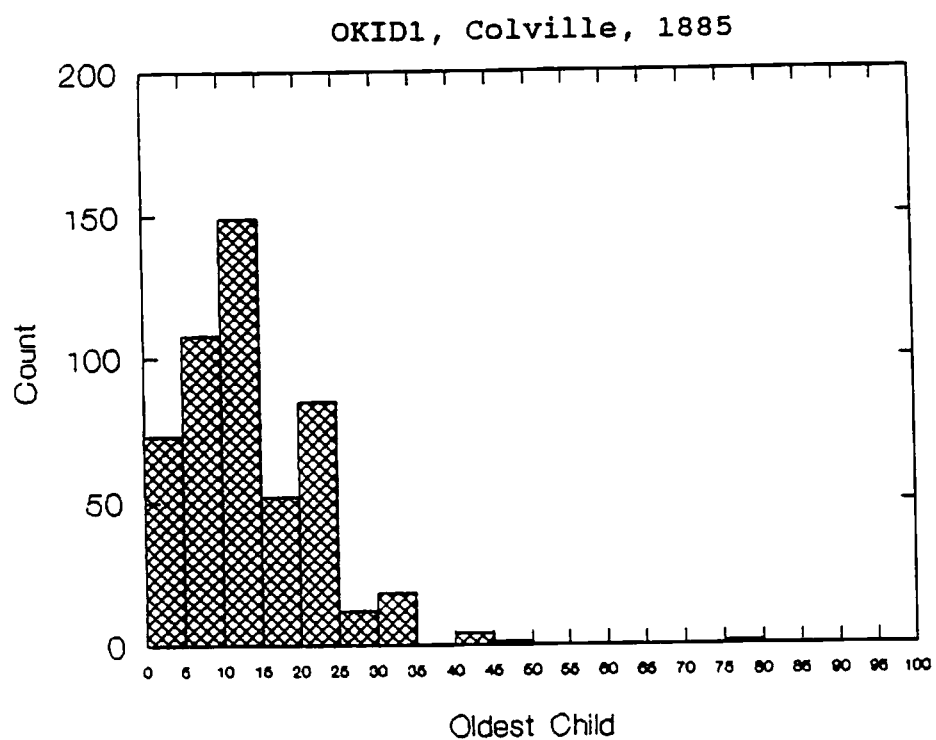
	COLVILLE		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
0	936	64.9	1613	65.5	678	62.3	1238	71.3
1	225	15.6	426	17.3	141	13.0	153	8.8
2	137	9.5	265	10.8	76	7.0	118	6.8
3	69	4.8	115	4.7	81	7.4	75	4.3
4	51	3.5	34	1.4	76	7.0	61	3.5
5	17	1.2	6	.2	27	2.5	50	2.9
6	8	.6	1	.0	4	.4	24	1.4
7					3	.3	12	.7
8					2	.2	2	.1
9							3	.2
10			1	.0				

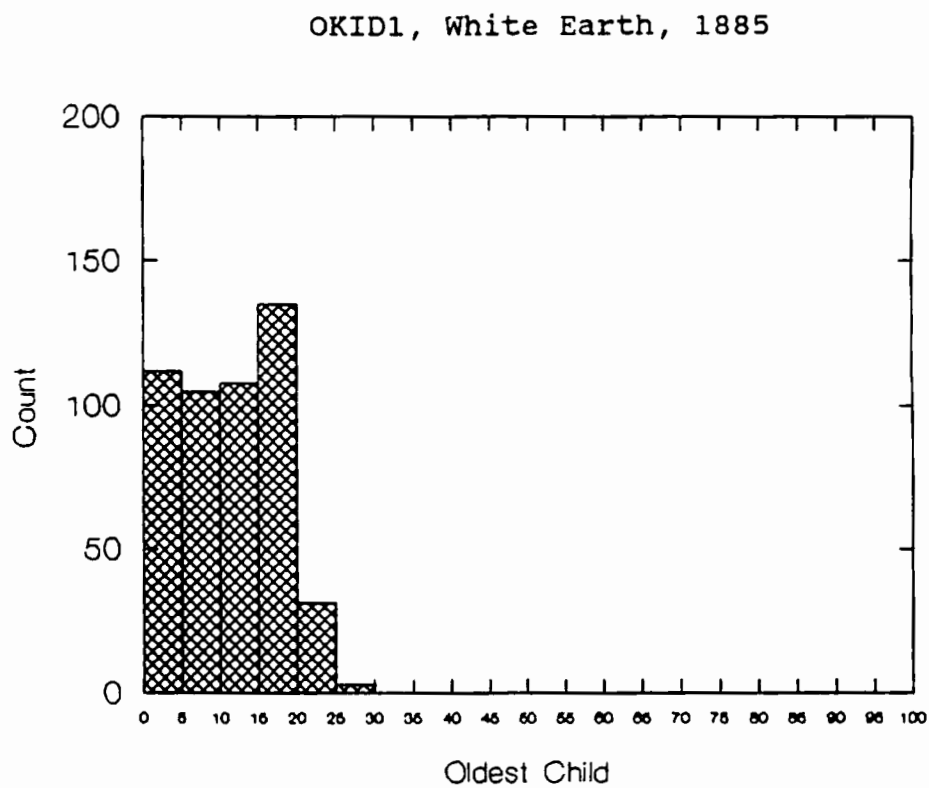
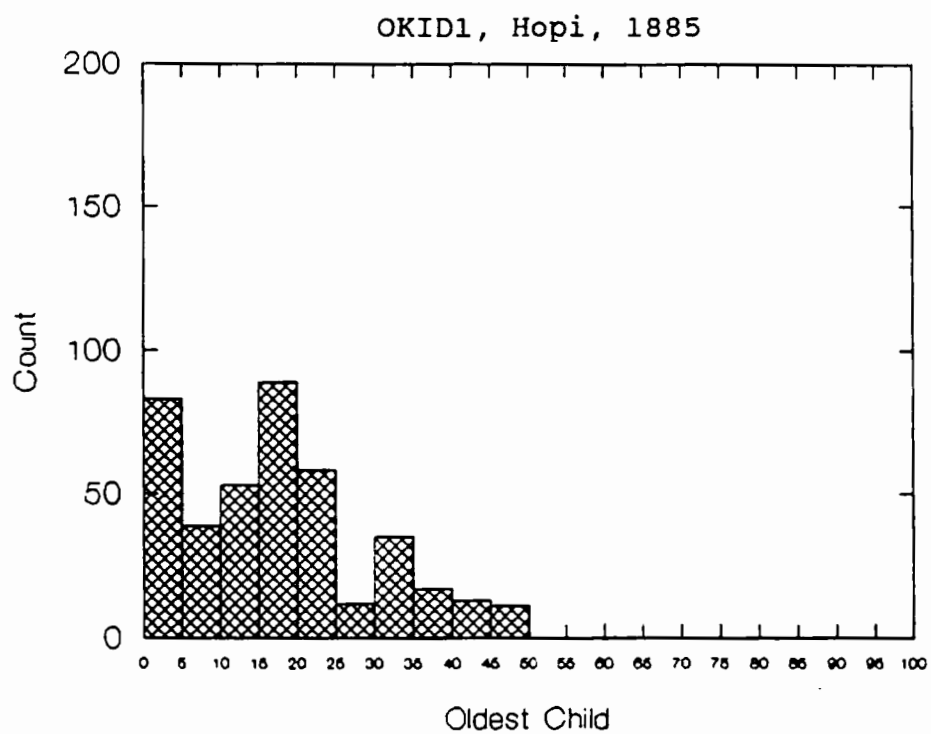
NUMCH5 - number of own children under 5. Constructed.
Missing data: 9

	COLVILLE		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
0	1251	86.7	2088	84.8	901	82.8	1403	80.8
1	142	9.8	318	12.9	140	12.9	199	11.5
2	42	2.9	33	1.3	45	4.1	123	7.1
3	4	.3			2	.2	7	.4
9	4	.3	22	.9			4	.2

OKID1 - age of eldest own child. Constructed.
Missing data: 99

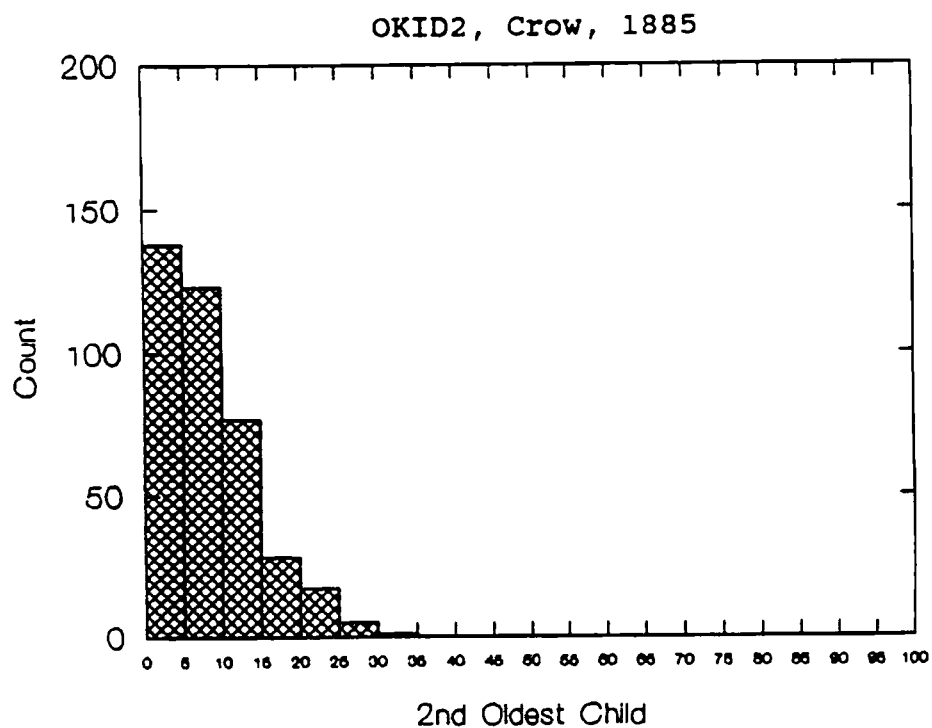
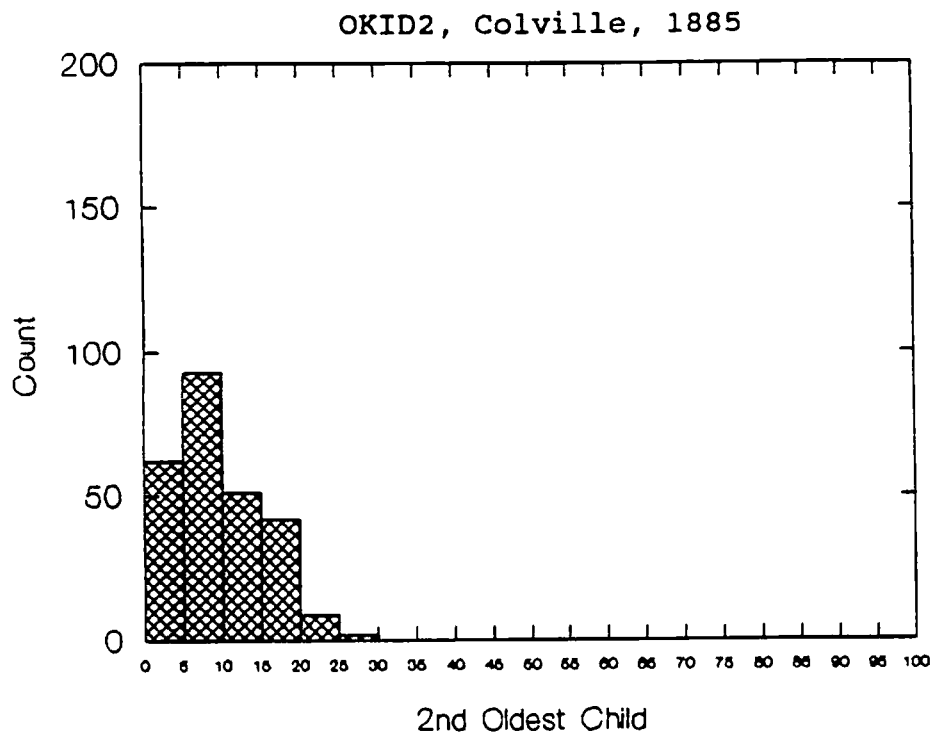
	COLVILLE		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
MISS	940	65.14	1635	66.44	678	62.32	1242	71.54



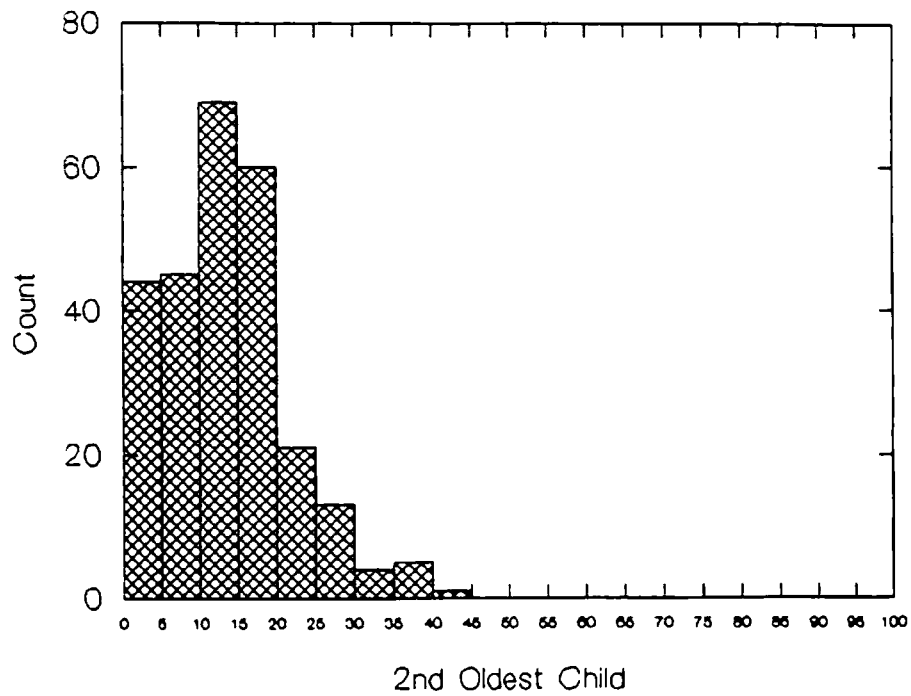


OKID2 - age of second oldest own child. Constructed.
 Missing data: 99

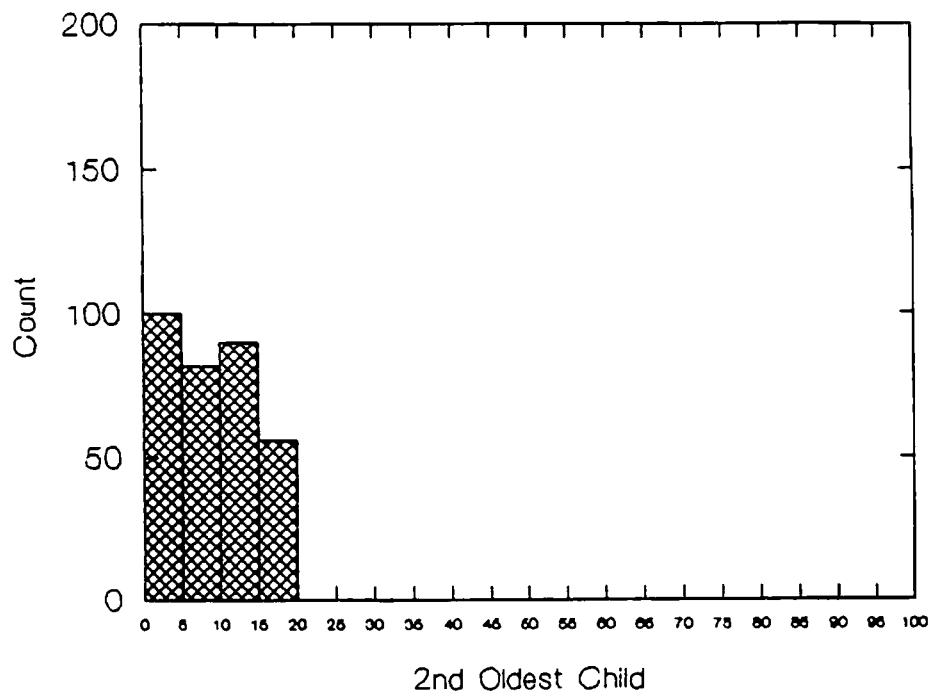
	COLVILLE		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
MISS	1184	82.05	2072	84.19	826	75.92	1408	81.11



OKID2, Hopi, 1885

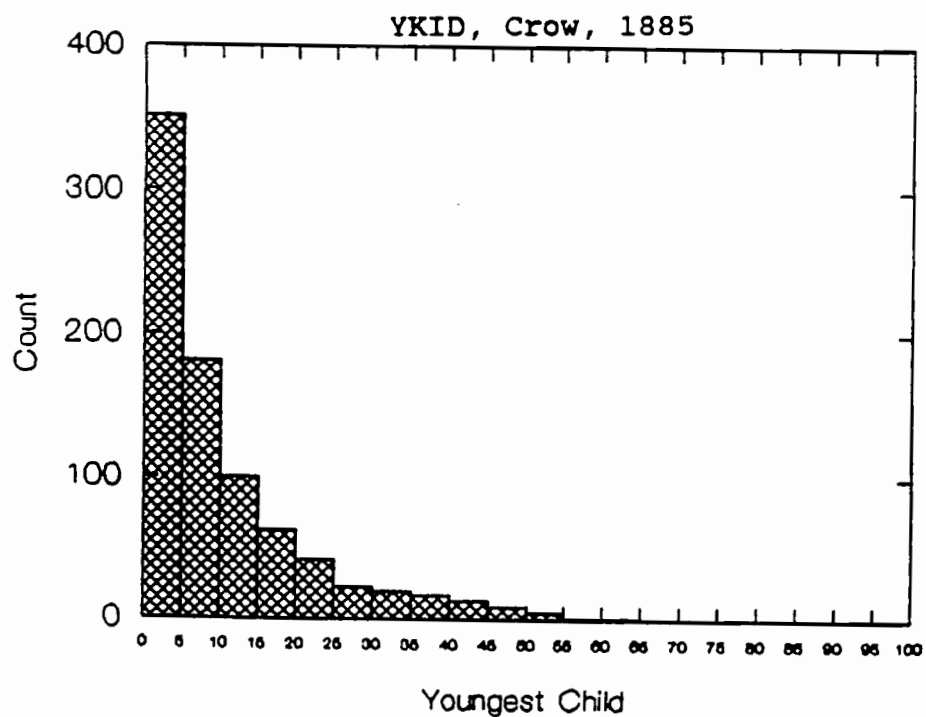
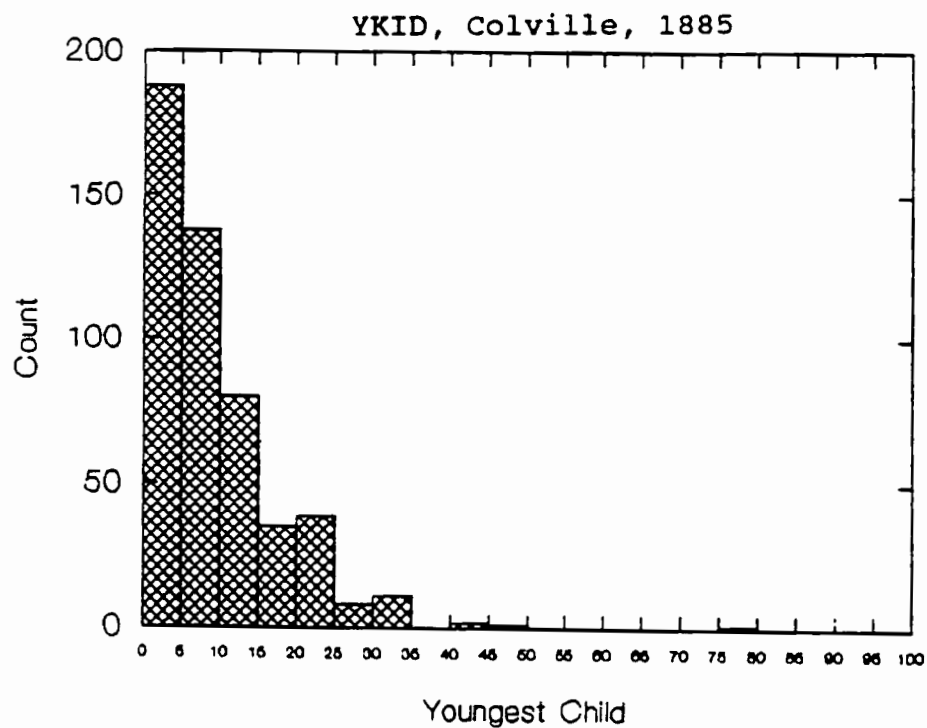


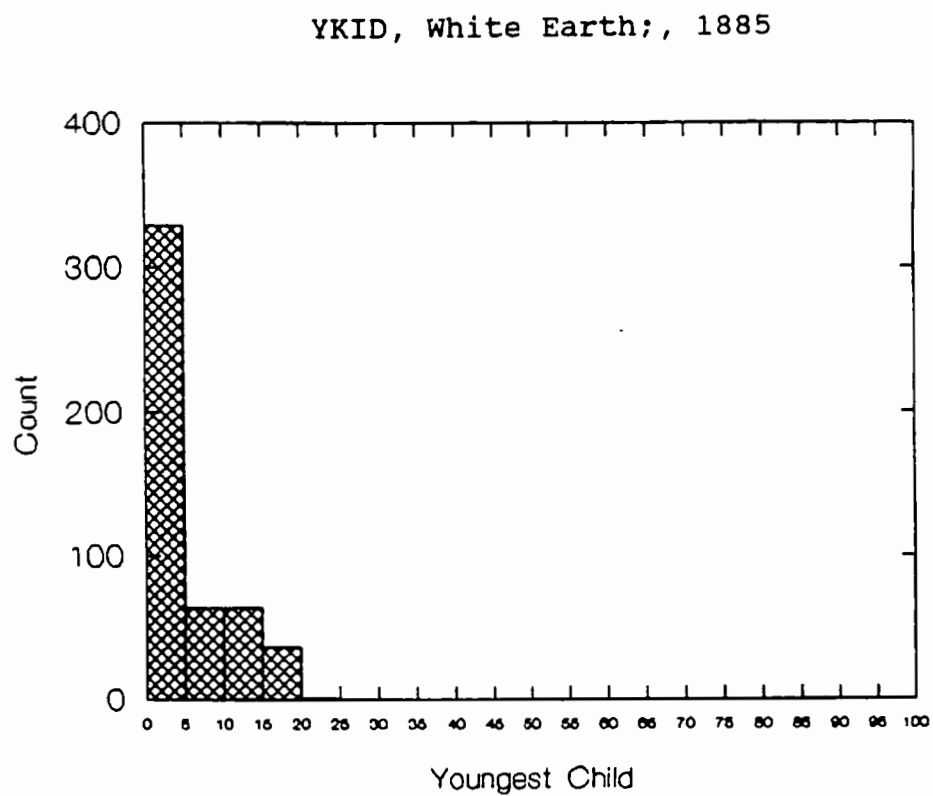
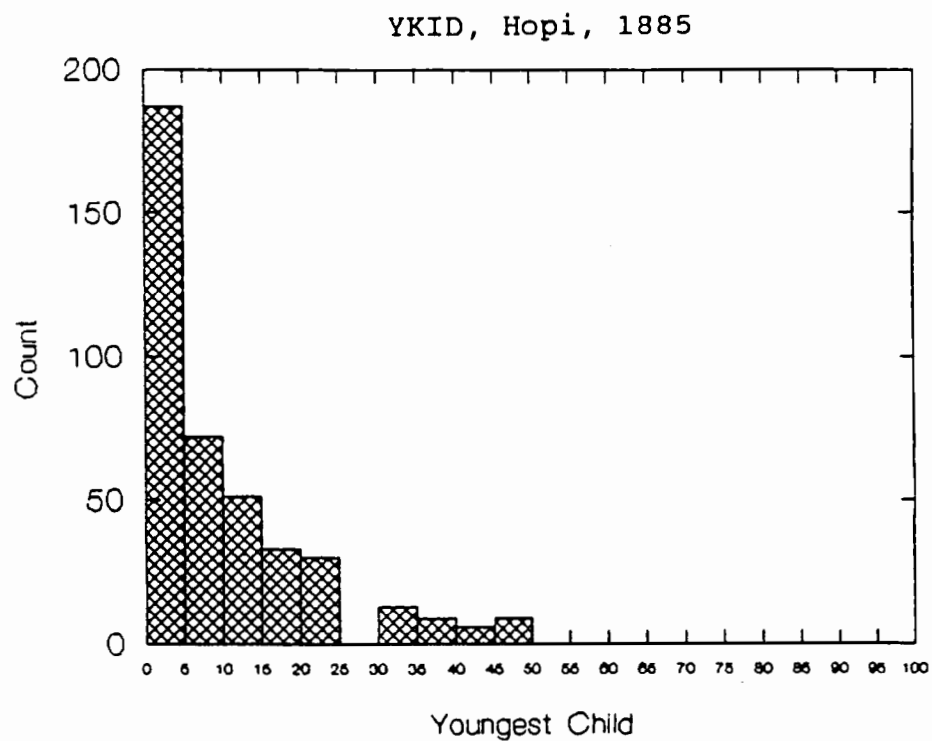
OKID2, White Earth, 1885



YKID - age of youngest own child. Constructed.
 Missing Data: 99

	COLVILLE		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
MISS	940	65.14	1635	66.44	678	62.32	1242	71.54





KIDS16 - number of individuals in family age 16 and younger.
 Constructed.
 Missing data: 99

	COLVILLE		CROW		HOPI		WHITE	EARTH
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
0	446	30.9	310	12.6	181	16.6	326	18.8
1	345	23.9	751	30.5	184	16.9	323	18.6
2	276	19.1	810	32.9	259	23.8	282	16.2
3	155	10.7	403	16.4	213	19.6	264	15.2
4	158	10.9	62	2.5	158	14.5	192	11.1
5	30	2.1	33	1.3	38	3.5	215	12.4
6	8	.6	7	.3	34	3.1	63	3.6
7			20	.8	11	1.0	57	3.3
8					10	.9	10	.6
99	25	1.7	65	2.6			4	.2

NAME - Indian Name
 Character variable.
 Missing Data: N

ONAME - English Name
 Character variable.
NOTE: The agent sometimes used descriptive terms (BOY, GIRL, WIFE) instead of names
 Missing Data: N

OTHER - marginal comments of agent, age in months for 0 year olds
 Character variable. Constructed.
 Missing data: N

ALLOTNO - allotment number
 Missing data: 9999

NUMBER - individual's number in enumeration
 Missing data: none
NOTE: The enumerator for Hopi accidentally skipped #22, but otherwise the numbers were assigned to individuals in the order of their enumeration.)

STATUS - What was status of individual when the additions were made to the census (CROW)
 Character variable. Constructed (from marginal comments).
 Missing data: 9

VAL		FREQ	PCT
9	Missing	55	2.2
A	Alive	949	38.6
D	Dead	1438	58.4
P	Disappeared	19	.8

CHIEF - whether individual is listed as a chief (WHITE EARTH)
Missing data: none

	VAL	FREQ	PCT
YES	1	28	1.6
NO	2	1708	98.4

NAMETYPE - whether European or Indian (WHITE EARTH). Constructed.
Missing data: none

	VAL	FREQ	PCT
1	814	46.9	
2	922	53.1	

REMARRY - Did individual remarry after 1886-87? (Crow)
Character variable. Constructed (from marginal comments).
Missing data: 9

	VAL	FREQ	PCT
missing	9	2408	97.8
Yes	Y	53	2.2

DIEDYR - Year of death (CROW). Constructed.
Missing data: 9999

YEAR	FREQ	PCT	YEAR	FREQ	PCT	YEAR	FREQ	PCT
1884	1	.0	1895	66	2.7	1904	50	2.0
1887	1	.0	1896	65	2.6	1905	63	2.6
1888	2	.1	1897	56	2.3	1906	34	1.4
1889	3	.1	1898	36	1.5	1907	47	1.9
1890	165	6.7	1899	53	2.2	1908	41	1.7
1891	34	1.4	1900	52	2.1	1909	28	1.1
1892	59	2.4	1901	57	2.3	1910	17	.7
1893	95	3.9	1902	42	1.7	1911	2	.1
1894	83	3.4	1903	53	2.2	9999	1256	51.0

DIEDDATE - month & day of individual's death (CROW)
Character variable. Constructed (from marginal comments).
Missing data: N

DIEDAGE - age of individual when he/she died (CROW). Constructed
Missing data: 99

TNUMBER - Txxx (Crow)
NOTE: We do not know what the tnumber refers to--wills?
Character variable. Constructed (from marginal comments).
Missing data: N

OTHER2 - marginal comments (Crow)
Character variable. Constructed.
Missing data: N

1900

The federal censuses for 1900 Creek, Hopi, White Earth and Colville have an identical format, which generally follows the actual census form. At the end of some of the 1900 censuses, there is some information attached from the BIA censuses, particularly BAND for White Earth and other miscellaneous information for White Earth and Colville. Most codes are shared by all the 1900 and 1910 censuses and should be looked up in the preceding section (Description of variables). However, the codes for town, enumerator, and address vary by tribe and by census year. The individual descriptions should be referred to for that information. The census was taken during the month of June, 1900, but all respondents were asked to answer as if it were June 1.

For more information on the procedures for the 1900 census, see the enumerator instructions, reprinted as Robert G. Barrows, "Instructions to Enumerators for Completing the 1900 Census Population Schedule," Historical Methods Newsletter, vol.9, number 4 (September, 1976), 201-212.

COLVILLE AGENCY CENSUS

These data come from National Archives Microfilm Collection T623, reel 1754. Henry M. Steele, the agency farmer, enumerated all of the Colville reservation. He missed recording some

occupations, but these same individuals had "months not employed" recorded as 1 or 2. He also used the word "movable" as an occupation (possibly itinerant laborers) and enumerated intermarried couples with the woman listed as head and the man as "husband." This data set contains all Indian households on the Colville reservation. Non-Indians living with Indians were therefore included.

Number of cases: 1170

CREEK NATION CENSUS

These data come from National Archives Microfilm Collection T623, reels 1853 and 1854. We collected data for all dwellings on the special Indian forms and for households with at least one Indian on the regular census form for the Creek Nation.

Number of cases: 8777

CROW AGENCY CENSUS

These data come from National Archives Microfilm Collection T623, reel 915. The enumerator was Agent J.E. Edwards and the census was filed on June 25, 1900.

Number of cases: 1876

HOPI AGENCY CENSUS

These data come from National Archives Microfilm Collection T623, reel 46. There were five enumerators. The quality and variety of their enumerations varied. They are described as

follows:

ENUM # 1: Voorhies. Excellent enumerator. An occasional inconsistency, but he follows population at risk closely. His enumeration seems particularly valuable for occupation, schooling, etc. Voorhies enumerates himself, white, as living at Second Mesa, with the occupation of teacher in the Indian Service.

ENUM # 2: Raush. Enumerated Moqui Training School only. He didn't complete questions on literacy.

ENUM # 3: Kampmeier. Fair enumerator. He seems consistent, but much of the information for literacy and occupations is missing. He tends to give occupations for household heads only. He also seems not to have multifamily dwellings with as much frequency as Voorhies and Ritter.

ENUM # 4: Ritter. Sloppy enumerator. Occupations are listed for household heads only, and everyone is a farmer. She marked F for farm, but made no farm schedules, so put H. Widows often have years married filled in, but we do not know what it means for them. She put 0 for schooling for several adults.

ENUM # 4: Abbott. Sloppy enumerator. She ignored dwelling altogether. The person who re-sequenced the dwelling numbers for the whole reservation filled in numbers (but there was only one family per dwelling). It looks like there is lots of age heaping in her enumeration, except that someone went through later to revise the return, changing

ages to coordinate with birthyear and birthmonth. We entered the ages that were most legible. Occupation detail was scanty here. Abbott listed as white, living at First Mesa, with the occupation of Field Matron.

This enumeration contains all Indian households living in Hopi villages. Navajos living elsewhere on the Hopi reservation were excluded from the data set.

Number of cases: 1964

WHITE EARTH AGENCY CENSUS

These data come from National Archives Microfilm Collection T623, reel 798. There were five enumerators, all of whom were mixed-blood or intermarried white residents of White Earth. The quality and variety of their enumerations are described as follows:

ENUM #1: John Leecy. Frequent missing data on occupation, months not employed, schooling and polygamy. The major problem with Leecy is that he disobeyed instructions and put all the whites on separate pages, removing them from their Indian households. We tried to link all the white spouses from Leecy's White Earth census schedules for whites with their families on the White Earth supplement sheets. Using surname and married, spouse absent at the criteria, we found many husbands and attached them as heads (in keeping with the biases of 19th century census takers). Some married spouse absent individuals remain unattached. Either we were

not able to match the spouses or the enumerator forgot to record the white household member on the regular enumeration sheet (or the spouse actually did live away from his/her family).

ENUM #2: Charles H. Beaulieu.

ENUM #3: Robert P. Fairbanks. The major problem with Fairbanks is that he apparently copied the Bureau of Indian Affairs census for the Otter Tail Band for his enumeration district since the two lists are almost identical. This causes two other problems: children surviving almost always matches children ever born and the households are more likely to be nuclear family units than actual households based on residence. Relationship to head is often missing; on the BIA censuses these people were listed with blank relationships and were listed separately after the family Fairbanks listed them with in the 1900 census.

ENUM #4: R.G. Beaulieu

ENUM #5: J.B. Branley

Because this data set contains all Indian households on the White Earth reservation, it contains non-Indians living with Indians.

Number of cases: 2928

Columns for use with 1900 data sets.

1-4	(4)	HHNO*	89-89	(1)	MORT
5-5	(1)	INDSUPP	90-90	(1)	FARM
6-8	(3)	TOWN	91-91	(1)	NAME2TYP
9-10	(2)	ENUM	92-111	(20)	NAME2*
11-12	(2)	ADDRESS*	112-113	(2)	TRIBE*
13-15	(3)	DWELNO*	114-115	(2)	FTRIBE*
16-16	(1)	DWELSIZE	116-117	(2)	MTRIBE*
17-19	(3)	FAMNO*	118-119	(2)	WBLOOD
20-21	(2)	FAMSIZE	120-120	(1)	POLYG
22-22	(1)	NAMETYPE	121-121	(1)	TAXED
23-50	(28)	NAME*	122-125	(4)	CITYEAR*
51-52	(2)	RELATION	126-126	(1)	CITALLOT*
53-53	(1)	RACE	127-127	(1)	DWELTYPE
54-54	(1)	SEX	128-129	(2)	FKEY*
55-56	(2)	BIRTHMO	130-131	(2)	MKEY*
57-60	(4)	BIRTHYR*	132-133	(2)	SPKEY*
61-62	(2)	AGE	134-134	(1)	EXT
63-63	(1)	MARSTA	135-136	(2)	SPAGE
64-65	(2)	YRSMARR	137-138	(2)	SPTRIBE*
66-67	(2)	CHBORN	139-141	(3)	SPOCC
68-69	(2)	CHALIVE	142-142	(1)	SPSPEAK
70-70	(1)	CHCODE	143-144	(2)	NUMKIDS
71-72	(2)	BPLACE	145-145	(1)	NUMCH5
73-74	(2)	FBPLACE	146-147	(2)	OKID1
75-76	(2)	MBPLACE	148-149	(2)	OKID2
77-79	(3)	OCCUP	150-151	(2)	YKID
80-80	(1)	RATION	152-153	(2)	KIDS16
81-82	(2)	EMPMOS			
83-84	(2)	SCHOOL	COLVILLE & WHITE EARTH		
85-85	(1)	READ	154-179	(26)	OTHERBIA*
86-86	(1)	WRITE			
87-87	(1)	SPEAK	WHITE EARTH ONLY		
88-88	(1)	OWN	180-181	(2)	BAND

* Data not reported on frequency tables or charts

CODES 1900

HHNO - number of household in order of enumeration

Constructed.

Missing data: none

INDSUPP - on supplemental Indian form or regular form?

Constructed.

Missing data: none

(unavailable for Crow)

COLVILLE			CREEK		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
1	117	100.0	7861	89.56			1964	100.0	2928	100.0
2			916	10.44						
9					1876	100.0				

TOWN (county for 1900 Colville)

Missing data: none

(unavailable for Crow)

CREEK	VAL	Freq	Pct		VAL	Freq	Pct
T19&18 R17 INOLA	1	48	.5	T16 R8	30	31	.4
T17 R18 WAGONER	2	356	4.1	T16 R7	31	40	.5
T16 R18	3	349	4.0	T14 R7	32	56	.6
T16 R19	4	2	.0	T15 R11	33	41	.5
T15 R19	5	35	.4	T14 R11	34	91	1.0
T17 R15	6	110	1.3	T15 R10	35	64	.7
T17 R16	7	41	.5	T16 R10 & 11	36	7	.1
T18 R16	8	61	.7	T16 R12	37	82	.9
T19 R16	9	58	.7	T14 R12	38	36	.4
T19 R15	10	16	.2	T15 R12	39	85	1.0
T19 R12 TULSA	11	197	2.2	T15&16 R12	40	26	.3
T19 R13	12	112	1.3	T14 R10	41	54	.6
T18 R13	13	21	.2	T16 R10	42	40	.5
T18 R14	14	42	.5	T15&16 R10	43	23	.3
T19 R11	15	20	.2	T16 R11	44	40	.5
T17 R13	16	90	1.0	T16 R16	45	18	.2
T17 R14	17	82	.9	T16 R15	46	69	.8
T19 R10	18	19	.2	T16 R14	47	55	.6
SAPULPA	19	66	.8	T16 R13	48	93	1.1
NEAR SAPULPA	20	458	5.2	T14 R13	49	32	.4
T17 R9	21	47	.5	T14 R15	50	8	.1
T19 R7	22	5	.1	T15 R13	51	14	2.1
T19 R9	23	9	.1	T14 R14	52	9	.1
T18 R8	24	9	.1	T15 R17	53	5	.1
T18 R9	25	6	.1	T15 R16	54	7	.1
T16 R9	26	39	.4	T16 R17	55	19	.2
T15 R9	27	120	1.4	T15 R18 MUSCOGEE	56	577	6.6
T14 R9	28	40	.5	T15 R18 MUSCOGEE	57	88	1.0
T14 R8	29	40	.5	JAIL			

TOWN (Cont.)

T14 R17	58	5	.1	T9 R8	86	25	.3
T14 R16	59	1	.0	T7 R10	87	26	.3
T14 R18	60	9	.1	T9 R9	88	16	.2
T11 R17	61	133	1.5	T9 R10	89	25	.3
T11 R16	62	56	.6	T10 R10	90	10	.1
T12 R16	63	77	.9	T8 R10	91	8	.1
T12 R17 CHECOTAH	64	151	1.7	T7 R8	92	79	.9
T11 R17&16	65	18	.2	T8 R8	93	120	1.4
T13 R17	66	40	.5	T6 R9	94	79	.9
T13 R13	67	359	4.1	T6 R8	95	12	.1
T11 R14	68	24	.3	T6 R10	96	3	.0
T11 R13	69	68	.8	T10 R14	97	79	.9
T11 R15	70	61	.7	T8 R11	98	10	.1
T12 R15	71	79	.9	T10 R12	99	41	.5
T10 R13	72	54	.6	T9 R14	100	33	.4
T13 R15	73	29	.3	T8 R14	101	41	.5
T13 R14	74	44	.5	T9 R13	102	51	.6
T12 R13	75	79	.9	T9 R12	103	23	.3
T12 R14	76	180	2.1	T9 R11	104	66	.8
T11	77	804	9.2	T10 R11	105	23	.3
T12	78	123	1.4	T9 R16 EUFAULA	106	311	3.5
T13	79	100	1.1	T10 R15	107	219	2.5
T10	80	7	.1	T10 R17	108	79	.9
T10 R9	81	52	.6	T9 R16	109	10	.1
T8 R9	82	119	1.4	EUFAULA H.S.			
T7 R9	83	125	1.4	T11 R15	110	89	1.0
HOLDENSVILLE				SOUTH 1/2			
T10 R8	84	78	.9	T10 R16	111	97	1.1
T11 R8	85	62	.7	T9 R15	112	57	.6

<u>HOPI</u>	Val	Freq	Pct
Shingwopavi	1	208	10.6
Shipaulovi	2	109	5.5
Mesovgnavi	3	218	11.1
Moqui Training School	4	126	6.4
Oraibi	5	766	39.0
First Mesa	6	537	27.3

<u>WHITE EARTH</u>	VAL	FREQ	PCT
Becker	1	1531	52.3
Polk	2	83	2.8
Norman	3	776	26.5
Beltrami	4	22	.8
Becker/Norman	5	516	17.6

ENUM - enumerator. (unavailable for Crow)
Missing data: none

VAL NAME	FREQ	PCT	VAL NAME	FREQ	PCT
<u>CREEK</u>					
1 W. Harper	48	.5	8 M. Stricklin	589	6.7
2 J. Hall	708	8.1	9 A. Perryman	353	4.0
3 A. Murray	275	3.1	10 A. Wheimether	63	.7
4 J. Huffman	476	5.4	11 F. Taylor	31	.4
5 I. Dodd	524	6.0	12 S. Matthews	254	2.9
6 C. Crane	76	.9	13 C. Griswold	88	1.0
7 A. Allen	366	4.2	14 C. Gilmore	244	2.8

ENUM (Cont.)

15	J. Riley	128	1.5
16	J. Turpin	459	5.2
17	R. Brown	937	10.7
18	R. Bagby	664	7.6
19	G. Harrison	370	4.2
20	L. McNevins	546	6.2
21	S. Sanders	293	3.3
22	T. Meagher	407	4.6
23	A. Milam	878	10.0

HOPI

1	Voorhies	535	27.2
2	J. Raush	126	6.4
3	Kampmeier	207	10.5
4	Ritter	559	28.5
5	Abbott	537	27.3

WHITE EARTH

1	J. Leecy	937	32.0
2	C.H. Beaulieu	646	22.1
3	R.P. Fairbanks	586	20.0
4	R.G. Beaulieu	480	16.4
5	J.B. Branley	279	9.5

ADDRESS - street address. (unavailable for Crow)

Missing data: 99

DWELNO - dwelling number as given on form. (unavailable for Crow)

Missing data: 999

DWELSIZE - number of households in dwelling. Constructed.
(unavailable for Crow)

Missing data: none

	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
1	117	100.0	8661	98.68			1672	85.13	2922	99.80
2			104	1.18			244	12.42	6	.20
3			12	.14			48	2.44		0.0
9					1876	100.0				

FAMNO - family number as given on form. (unavailable for Crow)

Missing data: 999

FAMSIZE - number of individuals in the family. Constructed.

Missing data: none

NOTE: Individuals in institutions have a famsize of 99

	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
1	62	5.30	79	.90	107	5.70	7	.36	71	2.42
2	228	19.49	392	4.47	436	23.24	108	5.50	272	9.29
3	282	24.10	828	9.43	570	30.38	222	11.30	309	10.55
4	220	18.80	1216	13.85	420	22.39	252	12.83	404	13.80
5	180	15.38	1205	13.73	220	11.73	290	14.77	390	13.32
6	84	7.18	1068	12.17	60	3.20	300	15.27	408	13.93
7	63	5.38	1155	13.16	35	1.87	287	14.61	392	13.39
8	32	2.74	864	9.84	8	.43	184	9.37	304	10.38
9	9	.77	639	7.28	9	.48	63	3.21	162	5.53
10	10	.85	340	3.87	0.00		80	4.07	110	3.76
11			286	3.26	11	.59	33	1.68	55	1.88

FAMSIZE (Cont.)

COLVILLE			CREEK		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
12			252	2.87			12	.61	24	.82
13			143	1.63					13	.44
14			28	.32					14	.48
15			15	.17						
16			48	.55						
19			19	.22						
26			26	.30						
99			174	1.98			126	6.42		

NAMETYPE - Indian or European influence? Constructed.

Missing data: 9

(unavailable for Crow)

COLVILLE			CREEK		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
1	686	58.63	8746	99.65			286	14.56	1863	63.63
2	475	40.60	31	.35			1678	85.44	1065	36.37
9	9	.77			1876	100.0				

NAME (Indian name for Crow)

Character variable.

Missing data: N

RELATION - relationship to head of household

Missing data: 99

COLVILLE			CREEK		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
1	390	33.33	1692	19.28	681	36.30	389	19.81	688	23.50
2	257	21.97	1296	14.77	501	26.71	346	17.62	440	15.03
3	446	38.12	3472	39.56	558	29.74	702	35.74	1543	52.70
4	1	.09	277	3.16	8	.43	11	.56	56	1.91
5			33	.38	25	1.33			5	.17
7			49	.56						
10			80	.91			28	1.43		
11	13	1.11	302	3.44	6	.32	107	5.45	55	1.88
12			4	.05						
13			1	.01						
14			4	.05						
20	9	.77	50	.57	24	1.28	8	.41	15	.51
21			1	.01					1	.03
22	4	.34	39	.44			58	2.95		
23	2	.17	3	.03			7	.36	2	.07
24			1	.01			1	.05		
26			1	.01						
30	27	2.31	162	1.85	18	.96	24	1.22	15	.51
31			6	.07					3	.10
32			1	.01						
33	1	.09	110	1.25	1	.05	58	2.95	2	.07

RELATION (Cont.)

VAL	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
34			1	.01						
40	4	.34	11	.13			15	.76	1	.03
41			1	.01			2	.10		
42	1	.09	216	2.46	2	.11	56	2.85	19	.65
43			3	.03						
44			1	.01			3	.15		
45			7	.08			5	.25		
50	4	.34	162	1.85			6	.31	1	.03
51			2	.02						
52							4	.20		
70			372	1.24	13	.69	1	.05	12	.41
71			25	.28						
72			3	.03						
74			88	1.00						
75			118	1.34			2	.10	3	.10
76			3	.03						
78			29	.33						
79			11	.03						
80							5	.25		
81			13	.15						
82			107	1.22			126	6.42		
83			7	.08						
84			1	.01						
85			1	.01						
86			1	.01						
89			1	.01						
90			1	.01	5	.27				
95					20	1.07				
98					1	.05				
99	11	.94	8	.09	13	.69			67	2.29

RACE (unavailable for Crow)

Missing data: 9

VAL	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
1	10	.85	983	11.20					72	2.46
2		0.00	557	6.35					2856	97.54
3	116	99.15	7236	82.44			1964	100.0		
5			1	.01		0.0				
9					1876	100.0				

SEX

Missing data: 9

VAL	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
1	558	47.69	4536	51.68	933	49.73	1027	52.29	1467	50.10
2	612	52.31	4536 48.32		942	50.21	937	47.71	1461	49.90

BIRTHMO - month of birth
 Missing data: 99
 (unavailable for Crow)

	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
1	177	15.13	598	6.81			238	12.12	232	7.92
2	104	8.89	565	6.44			145	7.38	301	10.28
3	237	20.26	715	8.15			296	15.07	283	9.67
4	245	20.94	543	6.19			176	8.96	266	9.08
5	287	24.53	754	8.59			325	16.55	401	13.70
6	94	8.03	351	4.00			98	4.99	105	3.59
7	7	.60	413	4.71			105	5.35	187	6.39
8	4	.34	474	5.40			81	4.12	270	9.22
9	3	.26	490	5.58			96	4.89	251	8.57
10	3	.26	501	5.71			116	5.91	256	8.74
11	6	.51	392	4.47			125	6.36	164	5.60
12	3	.26	428	4.88			157	7.99	212	7.24
99			2553	29.09	1876	100.0	6	.31		

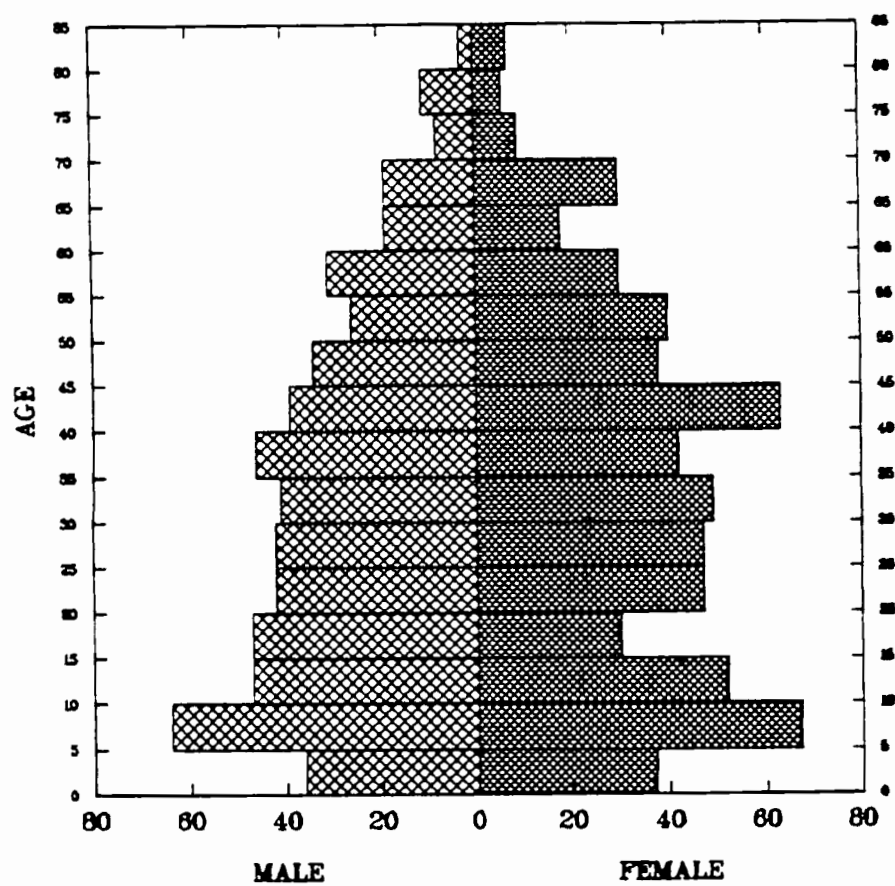
BIRTHYR - year of birth
 Missing data: 9999

AGE

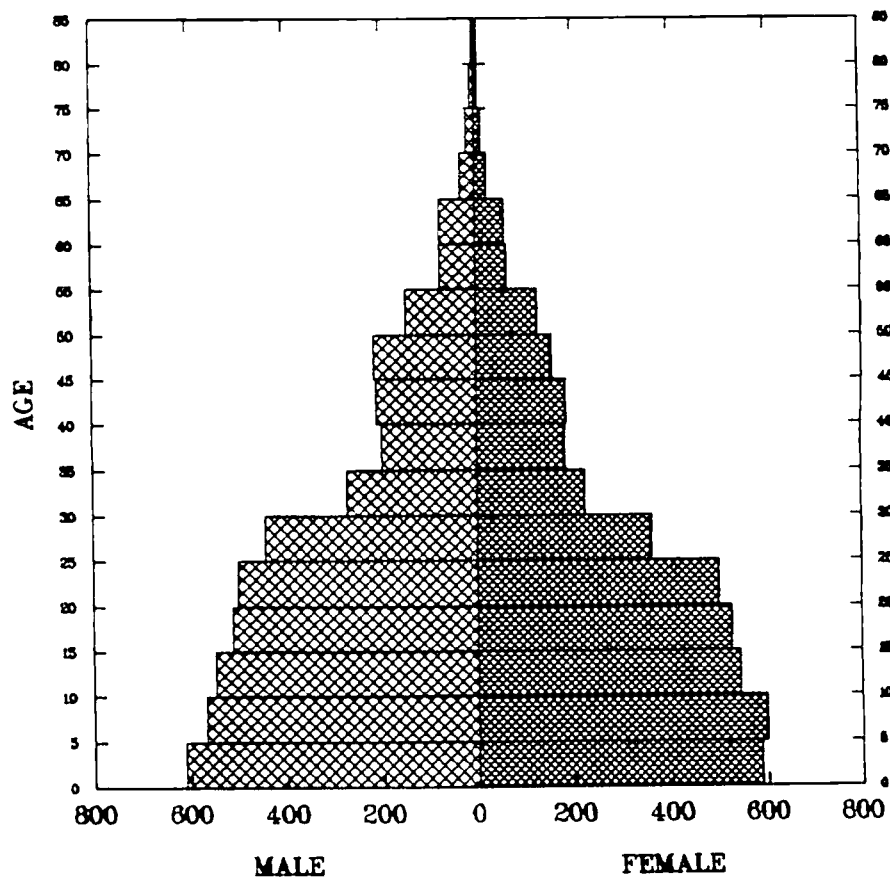
Missing data: 99

	COL- VILLE	CREEK	CROW	HOPI	WHITE EARTH
MISSING	0	150	2	0	0
MISS %	0.0	1.69	.11	0.0	0.0

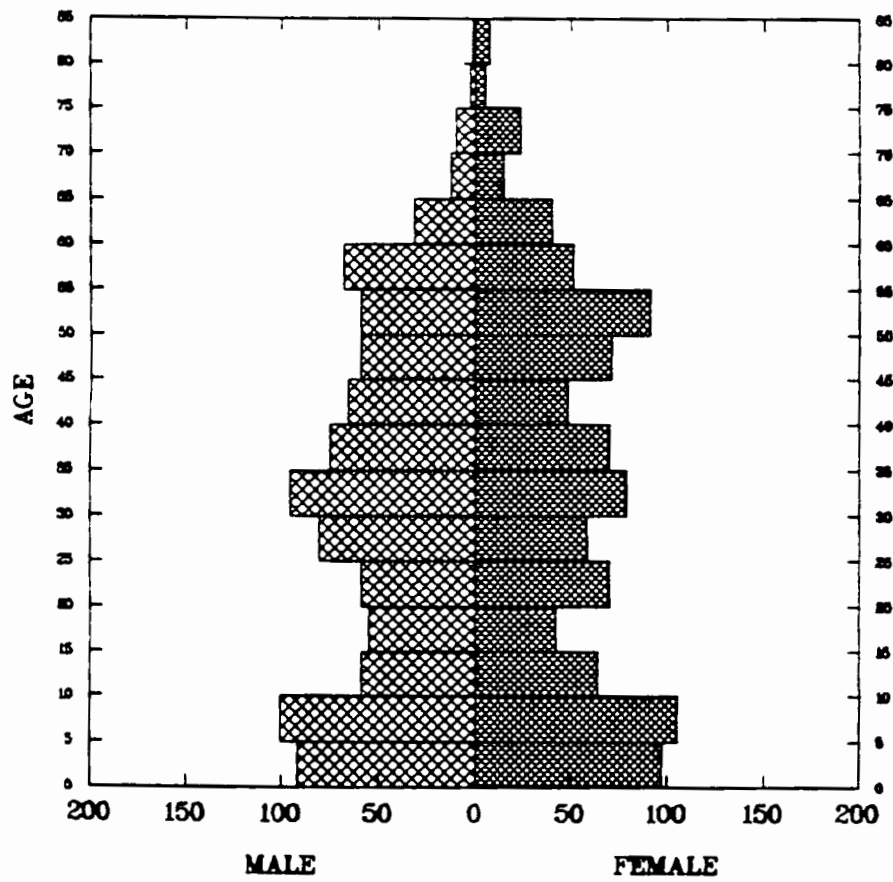
Age Structure, Colville, 1900



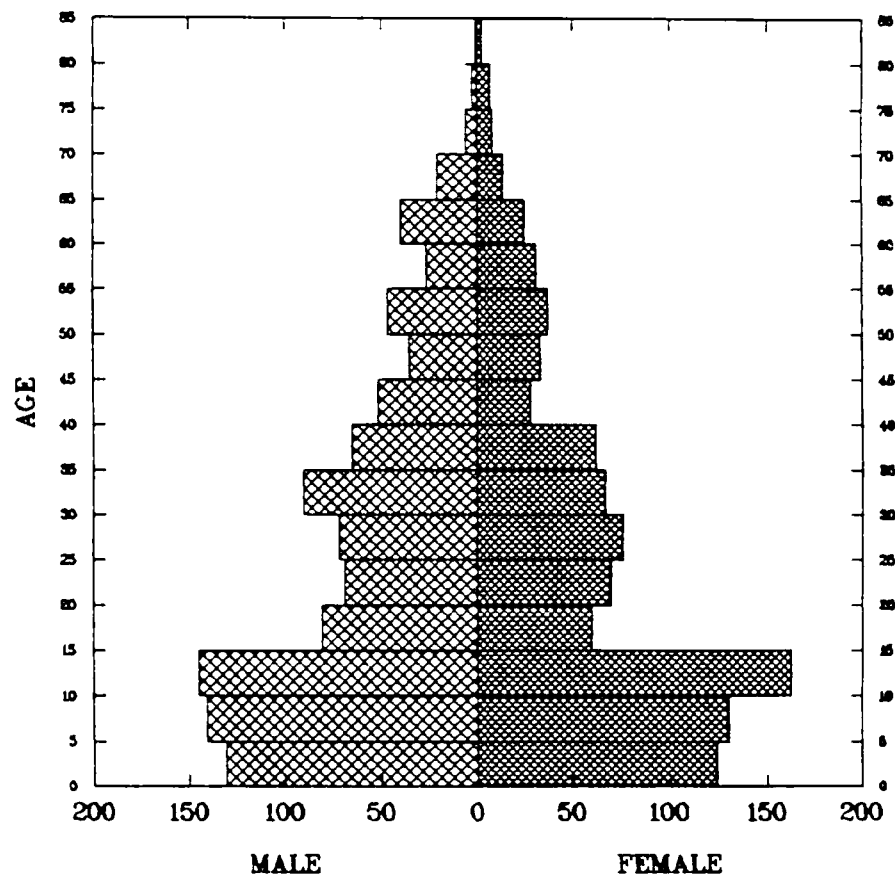
Age Structure, Creek, 1900



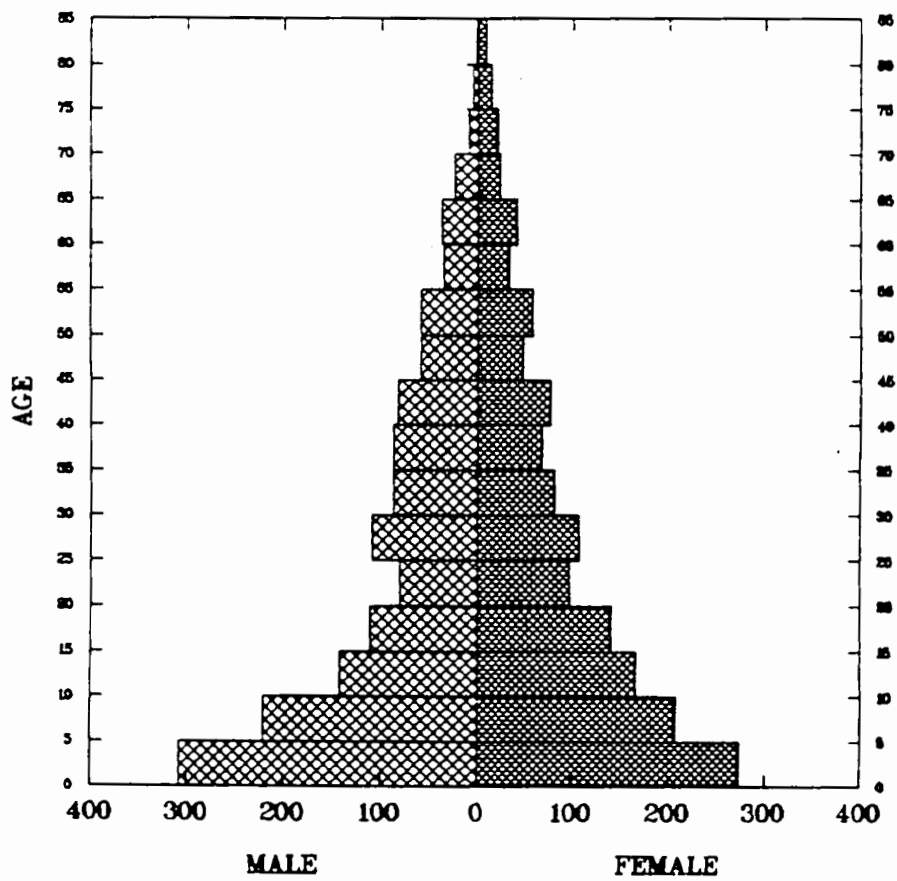
Age Structure, Crow, 1900



Age Structure, Hopi, 1900



Age Structure, White Earth, 1900



MARSTA - marital status

Missing data: 9

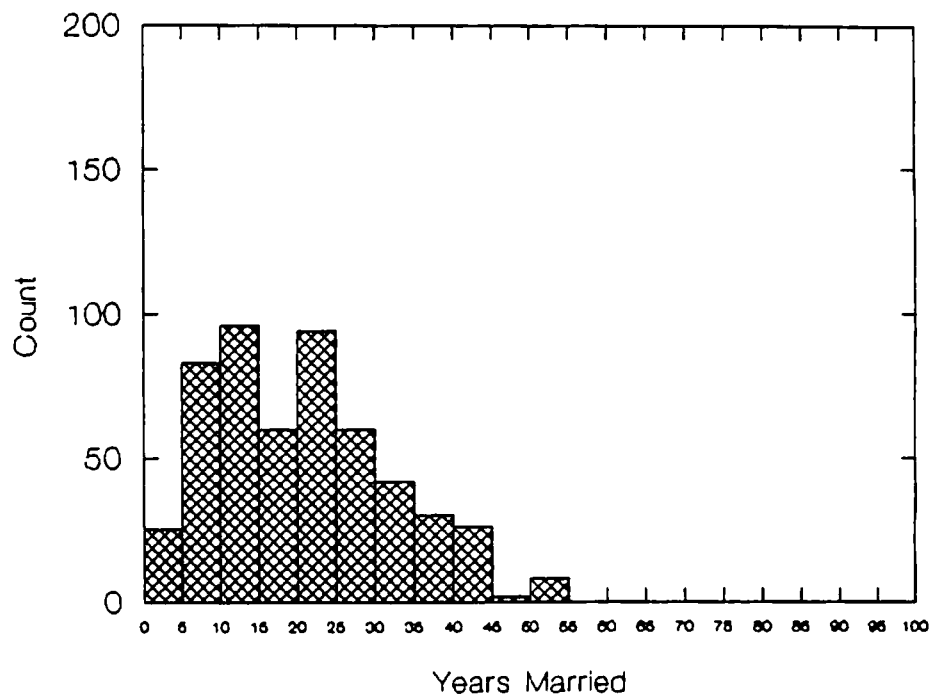
	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
1	513	43.85	2809	32.00	1000	53.30	770	39.21	879	30.02
2	6	.51	187	2.13	9	.48	12	.61	57	1.95
3	155	13.25	540	6.15	231	12.31	187	9.52	165	5.64
4		0.00	34	.39		0.00	25	1.27	30	1.02
5	496	42.39	5200	59.25	636	33.90	963	49.03	1785	60.96
9			7	.08			7	.36	12	.41

YRSMARR - number of years married to current spouse

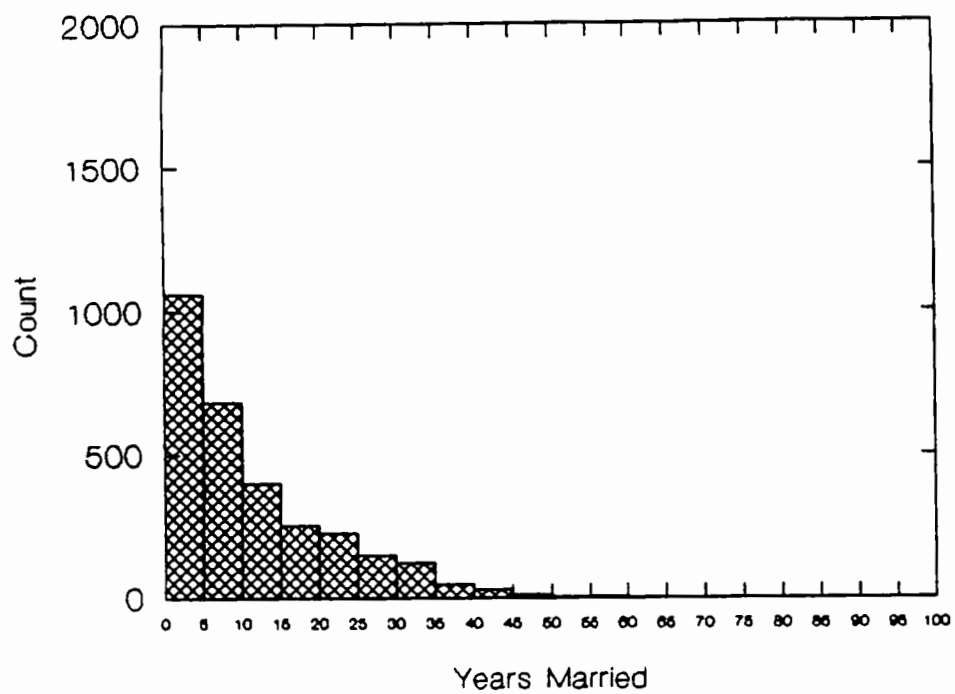
Missing data and inapplicable: 99

	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
MISS	644	55.04	5795	66.02	654	34.86	1188	60.49	2043	69.77

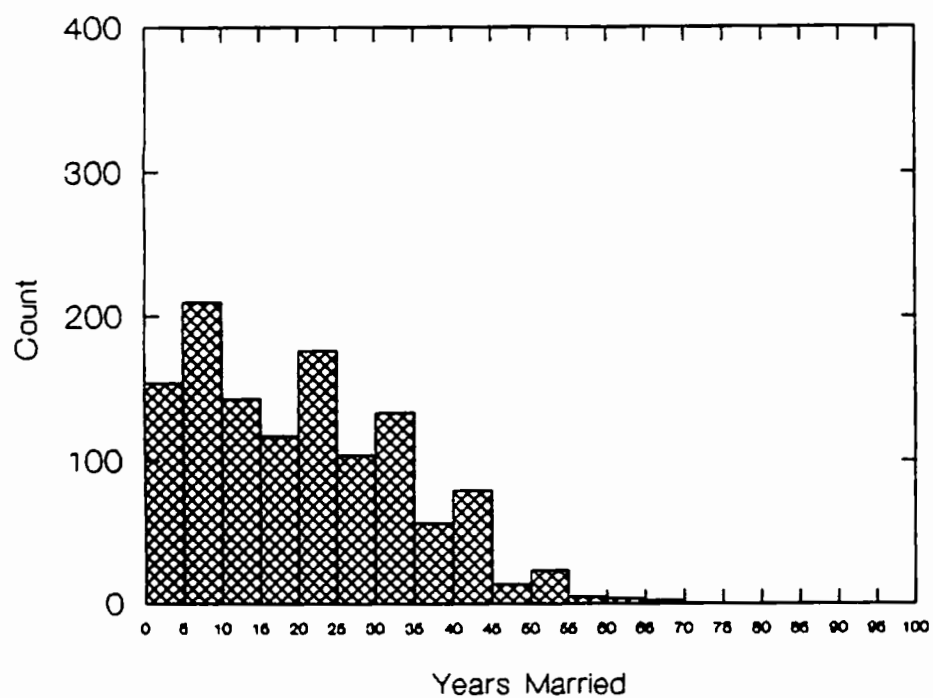
YEARS MARRIED, COLVILLE, 1900



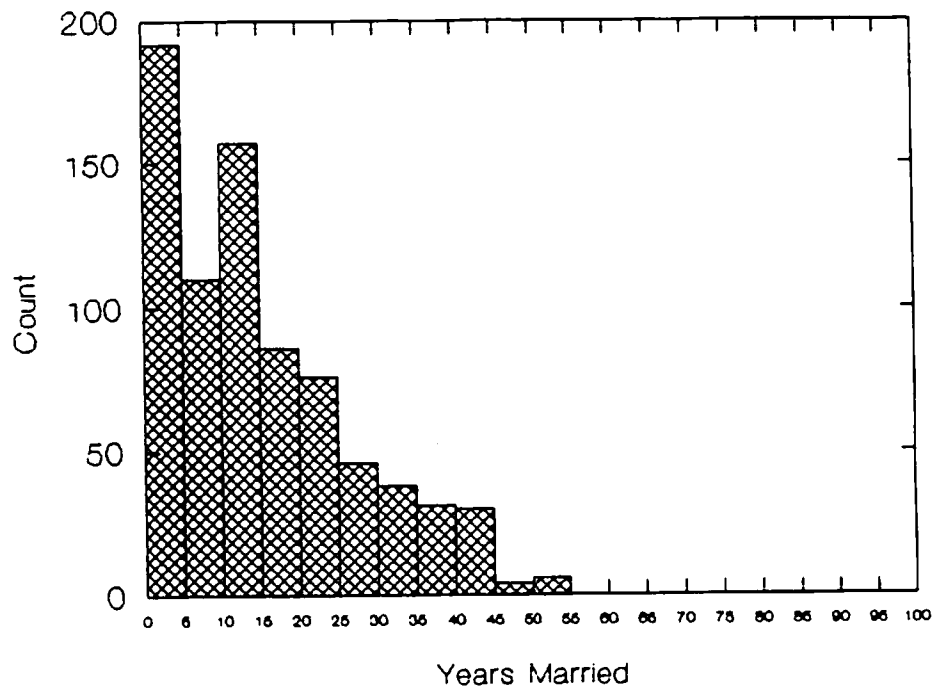
YEARS MARRIED, CREEK, 1900



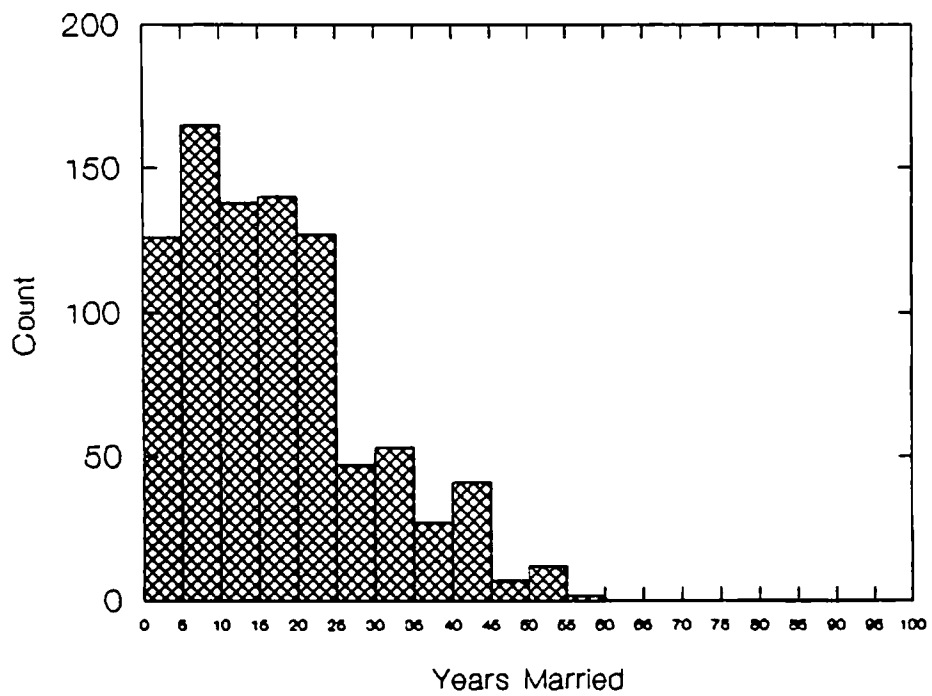
YEARS MARRIED, CROW, 1900



YEARS MARRIED, HOPI, 1900



YEARS MARRIED, WHITE EARTH, 1900



CHBORN - children ever born
Missing data and inapplicable: 99

VAL	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
0	127	10.85	252	2.87	115	6.13	53	2.70	60	2.05
1	80	6.84	314	3.58	56	2.99	51	2.60	87	2.97
2	54	4.62	287	3.27	117	6.24	37	1.88	75	2.56
3	42	3.59	187	2.13	95	5.06	39	1.99	86	2.94
4	36	3.08	186	2.12	106	5.65	38	1.93	73	2.49
5	29	2.48	141	1.61	56	2.99	41	2.09	52	1.78
6	2	.17	107	1.22	45	2.40	33	1.68	47	1.61
7	3	.26	94	1.07	31	1.65	38	1.93	28	.96
8			72	.82	19	1.01	39	1.99	26	.89
9			65	.74	6	.32	20	1.02	9	.31
10			53	.60	14	.75	41	2.09	11	.38
11			25	.28		0.00	12	.61	4	.14
12			23	.26	1	.05	10	.51	7	.24
13			7	.08		0.00	12	.61		0.00
14			8	.09		0.00	3	.15	1	.03
15			4	.05	1	.05	4	.20		0.00
16			4	.05					1	.03
17			1	.01						
18			1	.01						
99	797	68.12	6946	79.14	1214	64.71	1493	76.02	2361	80.64

CHALIVE - children still alive
Missing data and inapplicable: 99

VAL	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
0	150	12.82	355	4.04	179	9.54	89	4.53	66	2.25
1	104	8.89	413	4.71	157	8.37	10	5.35	113	3.86
2	58	4.96	342	3.90	177	9.43	5	4.79	99	3.38
3	32	2.74	240	2.73	80	4.26	94	3.00	88	3.01
4	20	1.71	165	1.88	38	2.03	59	3.26	72	2.46
5	5	.43	114	1.30	20	1.07	64	1.63	51	1.74
6	2	.17	77	.88	5	.27	32	.87	40	1.37
7	2	.17	54	.62	2	.11	17	.46	17	.58
8			27	.31	2	.11	9	.10	20	.68
9			20	.23			2	.05	10	.34
10			7	.08					2	.07
11			4	.05					2	.07
12			4	.05					2	.07
13			1	.01						
15			1	.01						
99	797	68.12	6953	79.22	1216	64.82	1492	75.97	2346	80.12

CHCODE - index to authenticity of CHBORN and CHALIVE. Constructed.
Missing data and inapplicable: 99

BPLACE - birthplace

Missing data: 99

FBPLACE - father's birthplace

Missing data: 99

MBPLACE - mother's birthplace

Missing data: 99

OCCUP - occupation

Missing data: 998 illegible, 999 missing

	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
0	214	18.29	1019	11.61	774	41.26	218	11.10	130	4.44
50	220	18.80	2099	23.91	504	26.87	504	25.66	385	13.15
100	121	10.34	13	.15			157	7.99	47	1.61
140			8	.09						
150			16	.18	17	.91	6	.31	19	.65
200			87	.99	3	.16			12	.41
250			126	1.44					3	.10
260			203	2.31	1	.05	1	.05	24	.82
300			177	2.02	14	.75			110	3.76
310	1	.09	14	.16						
320	1	.09	85	.97	3	.16			25	.85
400			110	1.25	1	.05			11	.38
500			23	.26			1	.05	14	.48
550			9	.10						
600			4	.05					38	1.30
999	613	52.39	4784	54.51	559	29.80	1077	54.84	2110	72.06

RATION - does Indian receive government rations?

Missing data: none

Inapplicable: 2 (for no)

	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
1	36	.85			1059	56.45			127	4.34
2	1134	96.92	8777	100.0	817	43.55	1964	100.0	2801	95.66

EMPMOS - number of months NOT employed in past year

Missing data and inapplicable: 99

(unavailable for Crow)

	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
0	40	3.42	1608	18.32			333	16.96	94	3.21
1	21	1.79	34	.39				0.00		0.00
2	57	4.87	88	1.00			1	.05	28	.96
3	64	5.47	215	2.45				0.00	14	.48
4	41	3.50	122	1.39				0.00	14	.48
5	9	.77	43	.49				0.00	5	.17

EMPMOS (cont.)

	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
6	22	1.88	318	3.62				0.00	32	1.09
7	1	.09	26	.30			2	.10	16	.55
8	7	.60	55	.63				0.00	8	.27
9	5	.43	28	.32			1	.05	3	.10
10	18	1.54	25	.28				0.00	7	.24
11	11	.94	3	.03				0.00		0.00
12	22	1.88	45	.51				0.00	12	.24
99	852	72.82	6167	70.26	1876	100.0	1627	82.84	2695	92.04

SCHOOL - number of months attended school in past year

Missing data and inapplicable: 99

NOTE: There are different codes for Crow than for the other data sets: 51 - YES, ATTENDED, 52 - NO, DID NOT ATTEND

	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
0	3	.26	1232	14.04			139	7.08	7	.24
1		0.00	20	.23	448	23.88		0.00		0.00
2	5	.43	62	.71	1379	73.51		0.00		0.00
3	36	3.08	122	1.39			3	.15	2	.07
4	19	1.62	94	1.07			12	.61	11	.38
5	19	1.62	98	1.12			19	.97		0.00
6	57	4.87	125	1.42			25	1.27	9	.31
7	1	.09	79	.90			18	.92		0.00
8	40	3.42	149	1.70			43	2.19		0.00
9	11	.94	355	4.04			103	5.24	305	10.42
10	4	.34	31	.35			177	9.01		0.00
11		0.00		0.00				0.00		0.00
12		0.00	7	.08	49	2.61	1	.05	1	.03
99	975	83.33	6403	72.95			1424	72.51	2593	88.56

READ - can individual read?

Missing data and inapplicable: 9

	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
1	147	12.56	3863	44.01	452	24.09	261	13.29	1022	34.90
2	1015	86.75	2981	33.96	1404	74.84	1177	59.93	1072	36.61
9	8	.68	1933	22.02	20	1.07	526	26.78	834	28.48

WRITE - can individual write?

Missing data and inapplicable: 9

	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
1	147	12.56	3619	41.23	451	24.04	258	13.14	1020	34.84
2	1015	86.75	3223	36.72	1407	75.00	1181	60.13	1083	36.99
9	8	.68	1935	22.05	18	.96	525	26.73	825	28.18

SPEAK - can individual speak English?
Missing data and inapplicable: 9

	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
1	224	19.15	4804	54.73	491	26.17	308	15.68	1441	49.21
2	938	80.17	2098	23.90	1357	72.33	1131	57.59	844	28.83
9	8	.68	1875	21.36	28	1.49	525	26.73	643	21.96

OWN - is home owned or rented?
Missing data and inapplicable: 9

	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
1	233	19.91	1414	16.11	599	31.93	358	18.23	672	22.95
2		0.00	232	2.64	5	.27		0.00	4	.14
3					1	.05				
9	937	80.09	7131	81.25	1271	67.70	1606	81.77	2252	76.91

MORT - is home mortgaged?
Missing data and inapplicable: 9
(unavailable for Crow)

	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
1	230	19.66	892	10.16			240	12.22	682	23.29
2		0.00	12	.14				0.00		0.00
9	940	80.34	7873	89.70	1876	100.0	1724	87.78	2246	76.71

FARM - is home a house or farm?
Missing data and inapplicable: 9
(unavailable for Crow)

	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
1	229	19.57	1059	12.07			243	12.37	194	6.63
2	118	10.09	649	7.39			140	7.13	506	17.28
3									12	.41
9	823	70.34	7069	80.54	1876	100.0	1581	80.50	2216	75.68

SUPPLEMENTAL QUESTIONS ON INDIAN FORM

NAME2TYP - is individual's second-listed name Eur. or Indian?
Constructed. (unavailable for Crow)
Missing data: 9

	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
1	24	2.05	68	.77				0.00	12	.41
2	3	.26	121	1.38			162	8.25	5	.17
3	1143	97.69	7911	90.13			1802	91.75	2911	99.42
9			677	7.71	1876	100.0				

NAME2 (English name for Crow)
 Character variable.
 Missing data: N

TRIBE
 Missing data: 99

FTRIBE - father's tribe
 Missing data: 99

MTRIBE - mother's tribe
 Missing data: 99

WBLOOD - degree of white blood
 Missing data and inapplicable: 99

	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PC
WHITE										
NONE	1020	87.18	4096	46.67	1715	91.42	1964	100.0	1258	42.96
0-1/4	22	1.88	661	7.53	24	1.28			618	21.11
1/4-1/2	89	7.61	830	9.46	83	4.43			781	26.67
1/2-3/4	3	.26	472	5.38	32	1.71			158	5.39
3/4-FULL		0.00	700	7.98		0.00			29	.99
FULL	9	.77	910	10.37	22	1.17			75	2.56
BLACK										
1/4			35	.40						
1/2			98	1.12						
1/2-3/4			125	1.42						
>3/4			72	.82						
FULL			105	1.20						
MISSING	27	2.31	673	7.67					9	.31

POLYG - is individual living in polygamy?
 Missing data and inapplicable: 9
 (unavailable for Crow)

	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
1	9	.77	12	.14			1	.05	12	.41
2	1161	99.23	2763	31.48			678	34.52	1242	42.42
9			6002	68.38	1876	100.0	1285	65.43	1674	57.17

TAXED - individual taxed?
 Missing data and inapplicable: 9
 (unavailable for Crow)

	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
1		0.00	1110	12.65				0.00	2822	96.38
2	1169	99.91	3015	34.35			1065	54.23	45	1.54
9	1	.09	4652	53.00	1876	100.0	899	45.77	61	2.08

CITYEAR - year of attaining citizenship
 Partly Constructed.
 Missing data and inapplicable: 9
 (unavailable for Crow)

CITALLOT - citizenship attained through allotment
 Partly Constructed.
 Missing data and inapplicable: 9

DWELTYPE - fixed or movable?
 Missing data and inapplicable: 9

	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
1	819	70.00	7175	81.75			1835	93.43	2799	95.59
2	347	29.66	35	.40				0.00	81	2.77
9	4	.34	1567	17.85			129	6.57	48	1.64

CONSTRUCTED VARIABLES

FKEY - position of individual's father in household
 Constructed.
 Missing data: 99

MKEY - position of individual's mother in household
 Constructed.
 Missing data: 99

SPKEY - position of individual's spouse in household
 Constructed.
 Missing data: 99

EXT - is family of head extended?
 Constructed.
 Missing data: 9
 Inapplicable: 8 (not related to household head)

	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
0	976	83.42	4636	52.82	1580	84.22	885	45.06	2274	77.66
1	65	5.56	1272	14.49	75	4.00	406	20.67	222	7.58
2	70	5.98	1549	17.65	49	2.61	227	11.56	152	5.19
3	31	2.65	499	5.69	6	.32	312	15.89	23	.79
8		0.00	780	8.89	157	8.37	134	6.82	15	.51
9	28	2.39	41	.47	9	.48			242	8.27

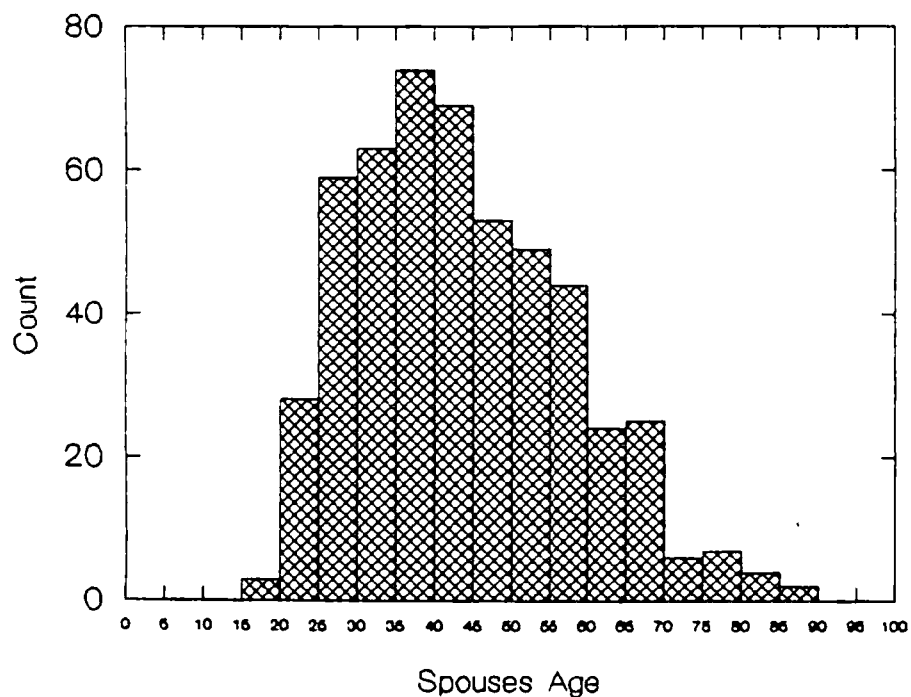
SPAGE - spouse's age

Constructed.

Missing data and inapplicable: 9

	COL- VILLE	CREEK	CROW	HOPÍ	WHITE EARTH
MISSING	660	6036	873	1194	2048
MISS %	56.41	68.77	46.54	60.79	69.95

SPAGE, COLVILLE, 1900

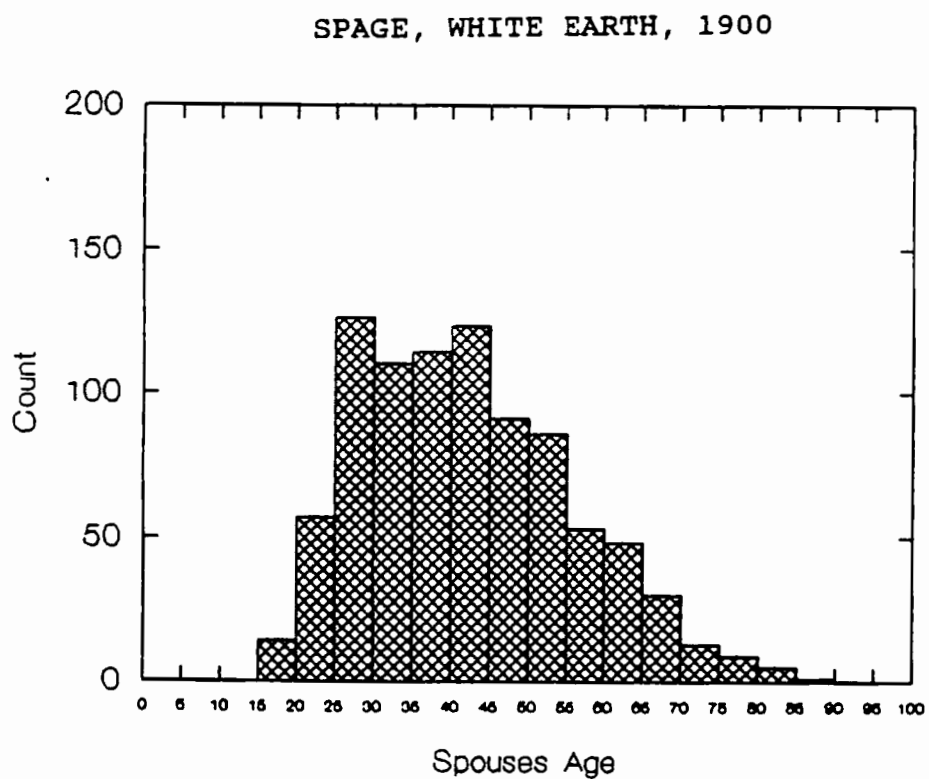
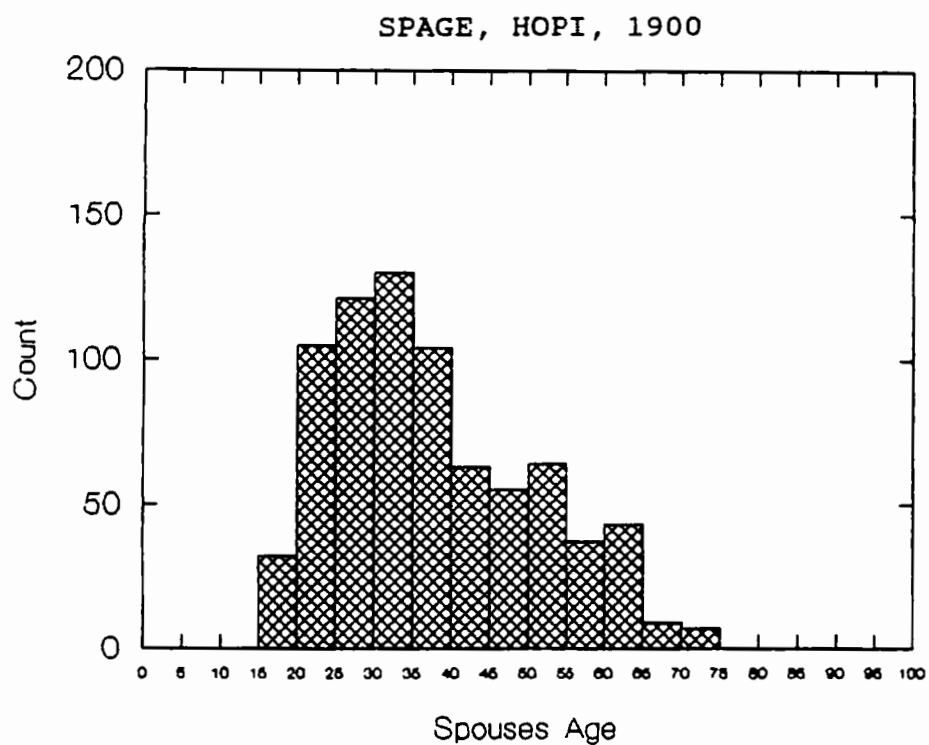


SPAGE, CREEK, 1900



SPAGE, CROW, 1900





SPTRIBE - spouse's tribe or race if non-Indian
Constructed.

Missing data and inapplicable: 99

SPOCC - spouse's occupation
Constructed.

Missing data and inapplicable: 999

VAL	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
	14	1.20	7	.08	302	16.10	2	.10	35	1.20
50	186	15.90	1037	11.81	411	21.91	352	17.92	245	8.37
100	44	3.76	8	.09			112	5.70	33	1.13
140			7	.08						
150			9	.10	13	.69	5	.25	11	.38
200			48	.55	3	.16			7	.24
250			63	.72					3	.10
260			20	.23					2	.07
300			51	.58	10	.53			52	1.78
310	1	.09	9	.10						
320	1	.09	32	.36	2	.11			19	.65
400			54	.62	1	.05			5	.17
500			9	.10			1	.05	11	.38
550			7	.08						
600			3	.03					20	.68
999	924	78.97	7413	84.46	1134	60.45	1492	75.97	2485	84.87

SPSPEAK - spouse's ability to speak English
Constructed.

Missing data and inapplicable: 9

VAL	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
					3	.16				
1	57	4.87	1941	22.11	338	18.02	74	3.77	473	16.15
2	450	38.46	859	9.79	1514	80.70	681	34.67	349	11.92
9	663	56.67	5977	68.10	21	.12	1209	61.56	2106	71.93

NUMKIDS - number of own kids in household
Constructed.
Missing data: none

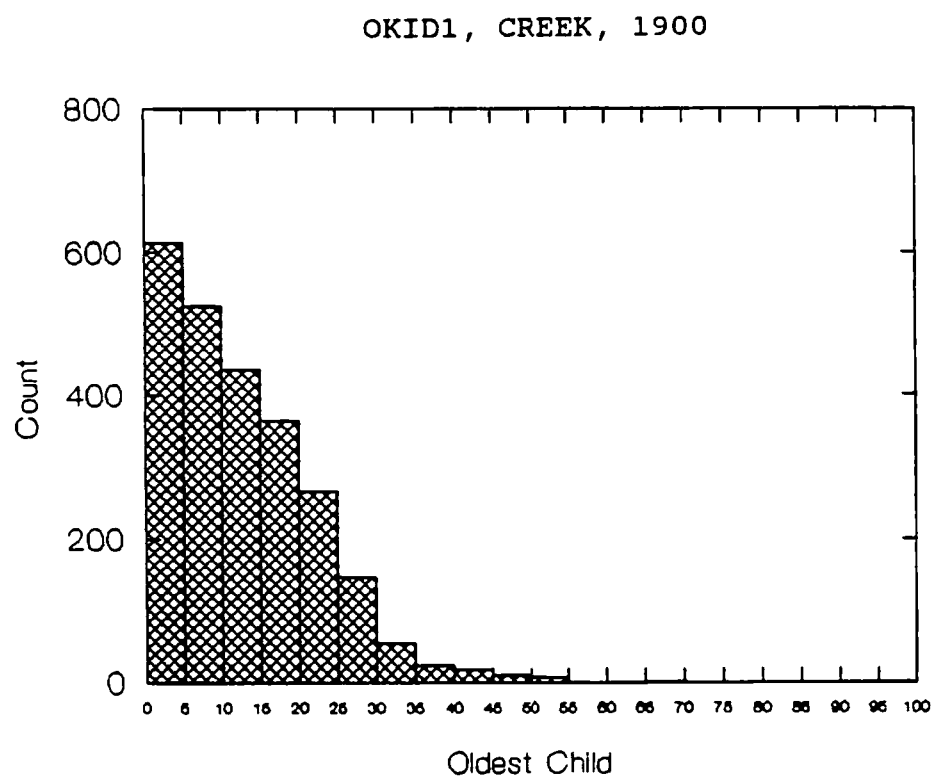
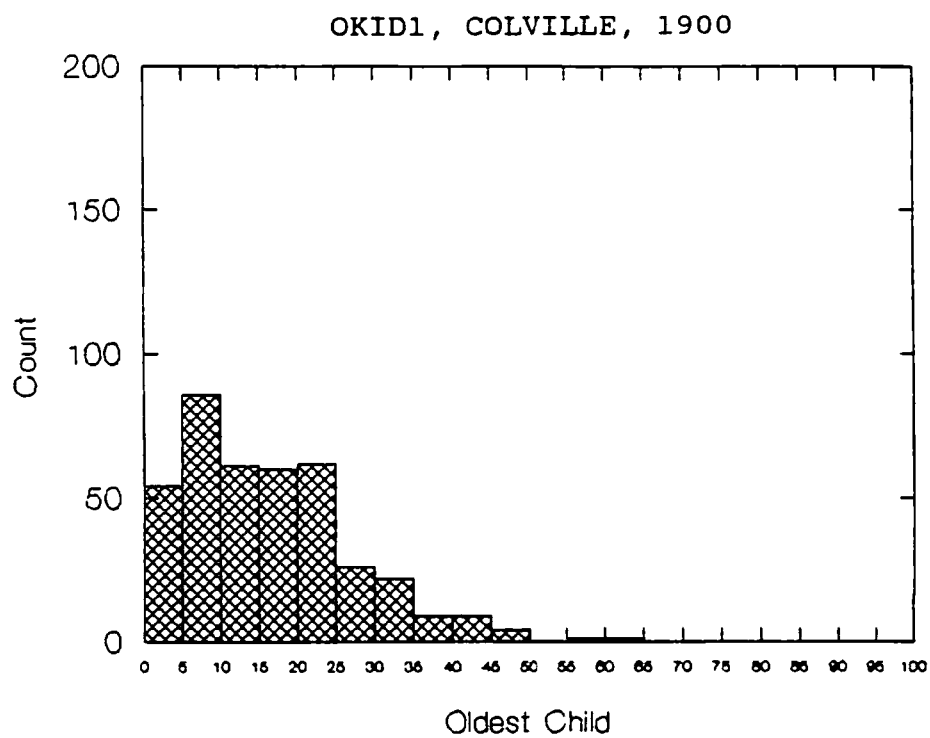
	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
0	775	66.24	6286	71.62	1224	65.25	1307	66.55	2055	70.18
1	181	15.47	826	9.41	358	19.08	250	12.73	211	7.21
2	112	9.57	593	6.76	209	11.14	160	8.15	190	6.49
3	55	4.70	400	4.56	56	2.99	94	4.79	153	5.23
4	28	2.39	269	3.06	19	1.01	79	4.02	111	3.79
5	10	.85	165	1.88	8	.43	50	2.55	95	3.24
6	6	.51	104	1.18		0.00	20	1.02	55	1.88
7	3	.26	83	.95	2	.11	2	.10	32	1.09
8			23	.26				0.00	16	.55
9			13	.15			2	.10	6	.20
10			10	.11						0.00
11			1	.01					2	.07
12			2	.02					2	.07
15			2	.02						

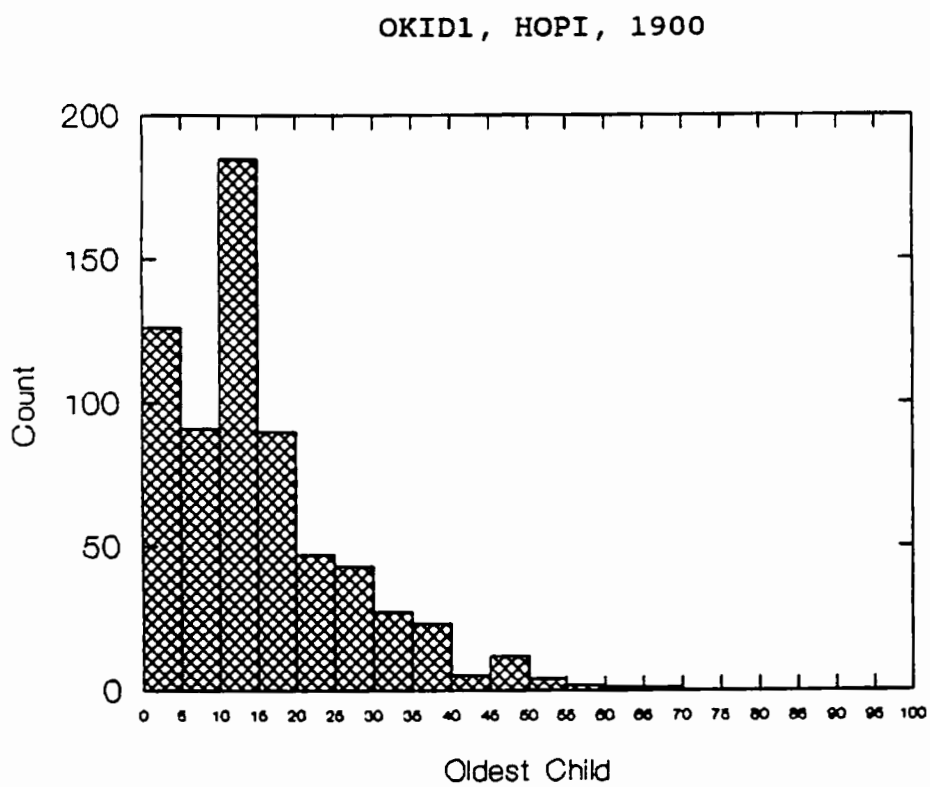
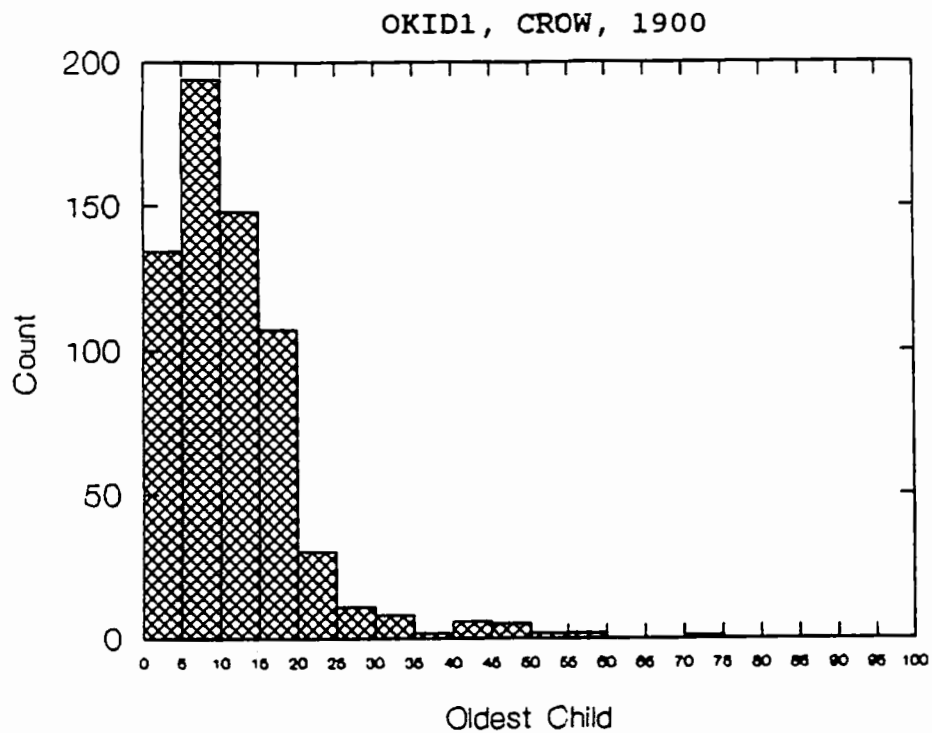
NUMCH5 - number of own kids under 5 in household
Constructed.
Missing data: 9 (if any child's age is missing)

	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
0	1051	89.83	7332	83.54	1566	83.48	1611	82.03	2369	80.91
1	104	8.89	881	10.04	269	14.34	239	12.17	227	7.75
2	15	1.28	445	5.07	30	1.60	98	4.99	255	8.71
3			89	1.01	9	.48	16	.81	67	2.29
4			6	.07		0.00			10	.34
9			24	.27	2	.11				

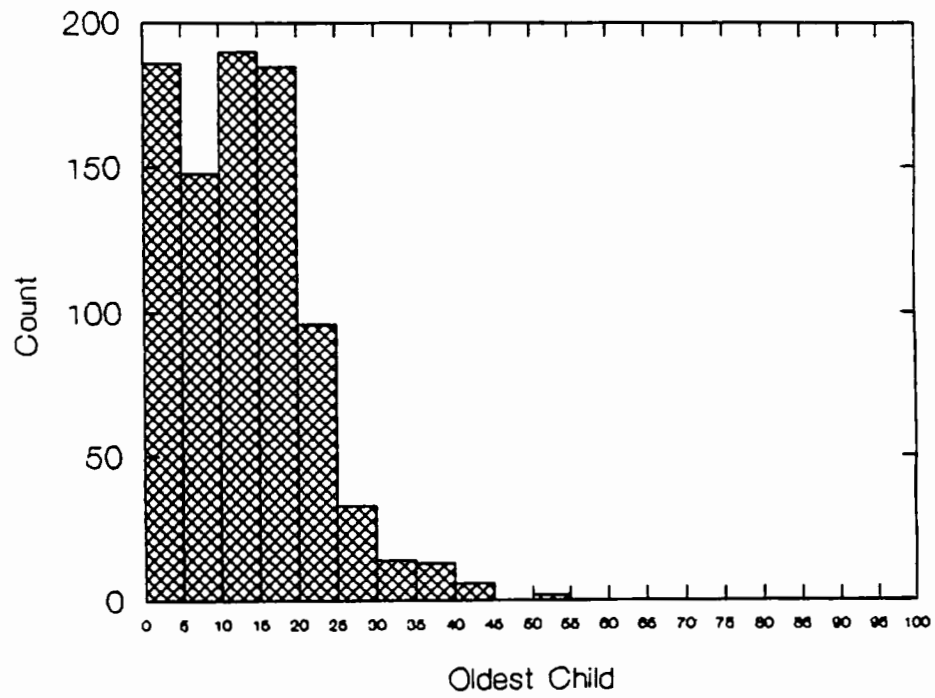
OKID1 - age of own oldest child in household
Constructed.
Missing data and inapplicable: 99

	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
MISS	775	66.24	6310	71.89	1226	65.35	1307	66.55	2055	70.18





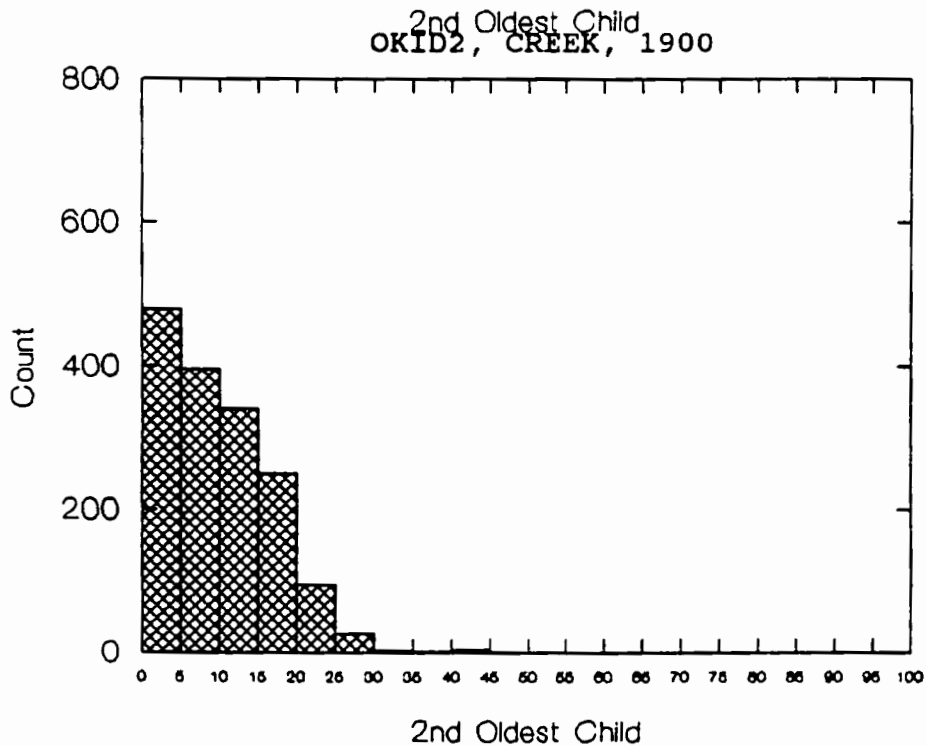
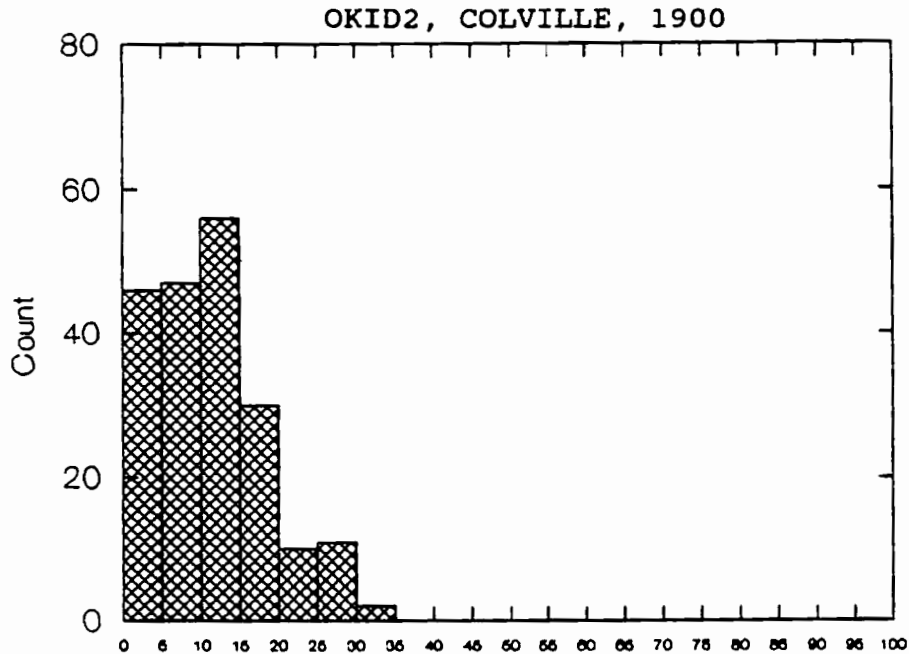
OKID1, WHITE EARTH, 1900

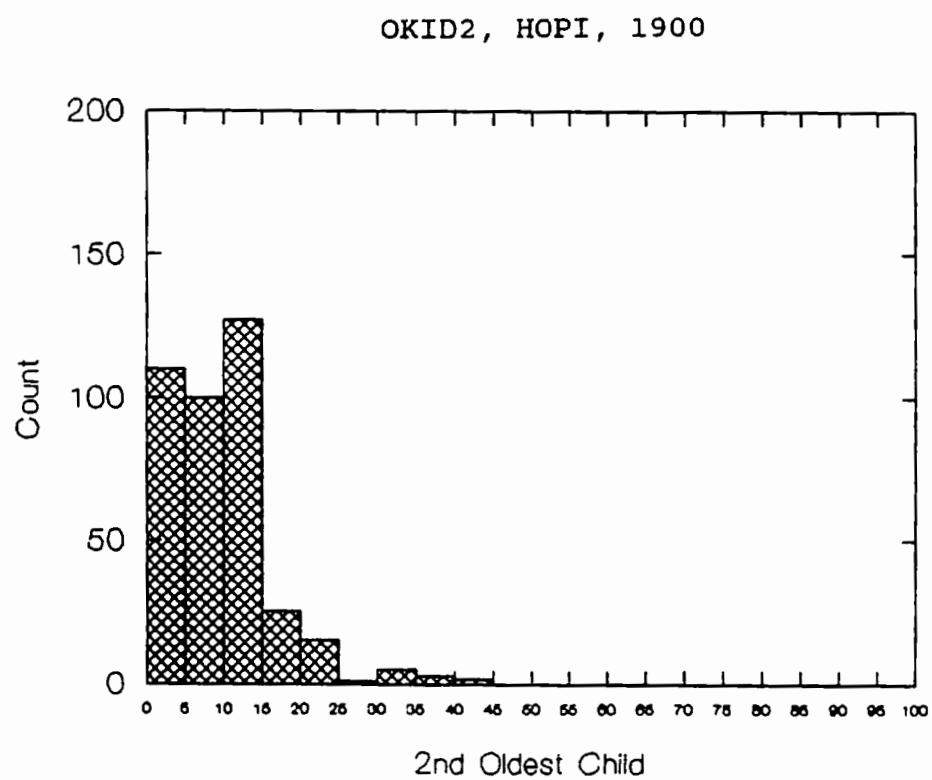
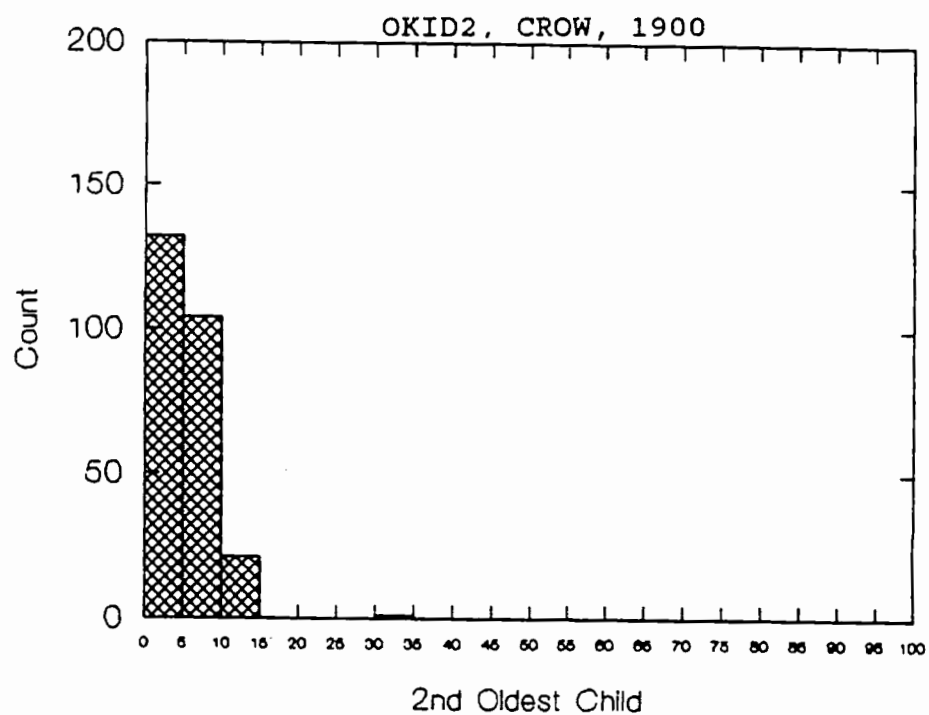


OKID2 - age of own second oldest child in household
Constructed.

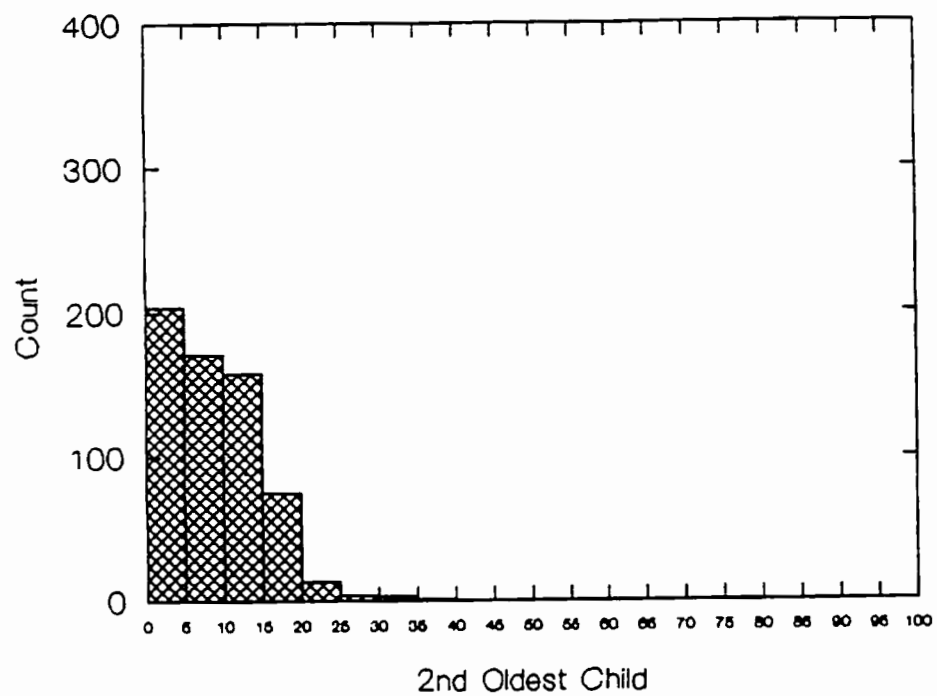
Missing data and inapplicable: 99

	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
MISS	968	82.74	7182	81.83	1618	86.25	1576	80.24	2299	78.52



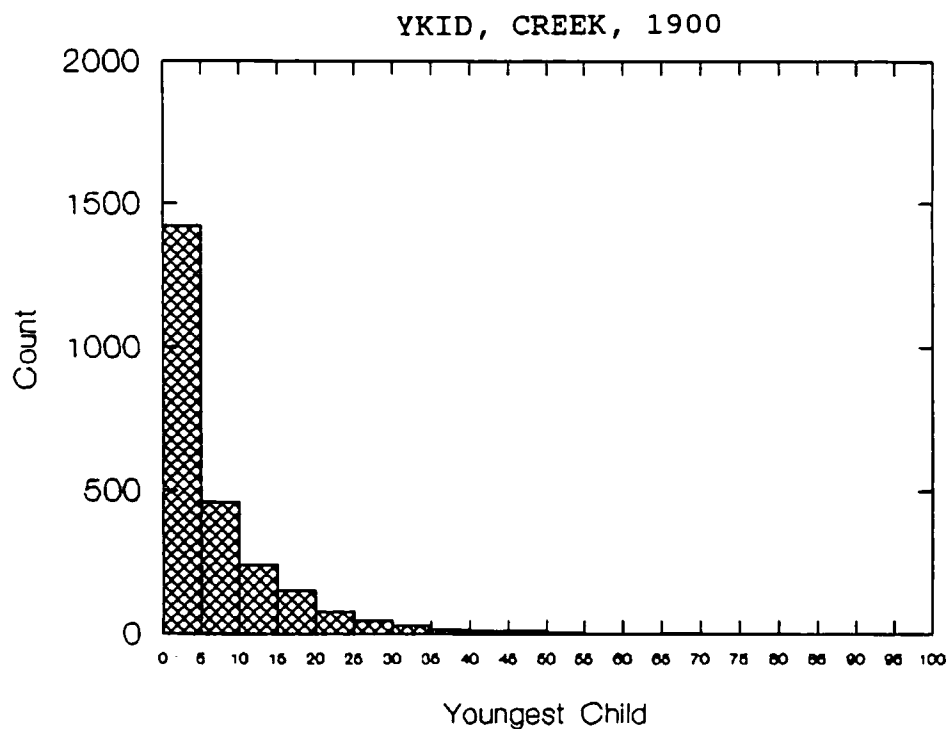
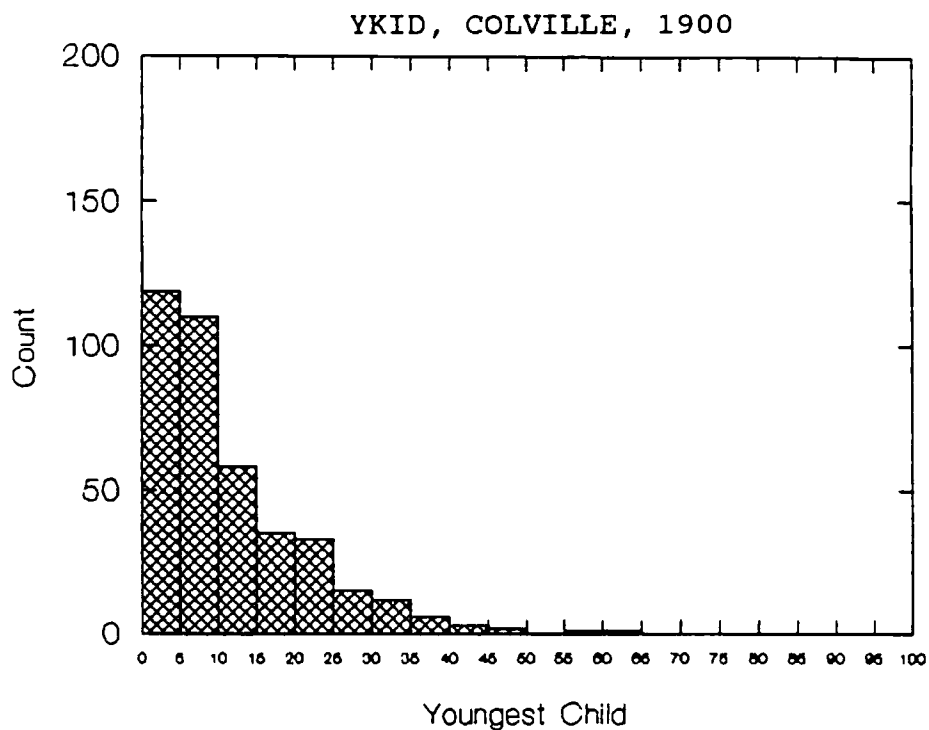


OKID2, WHITE EARTH, 1900

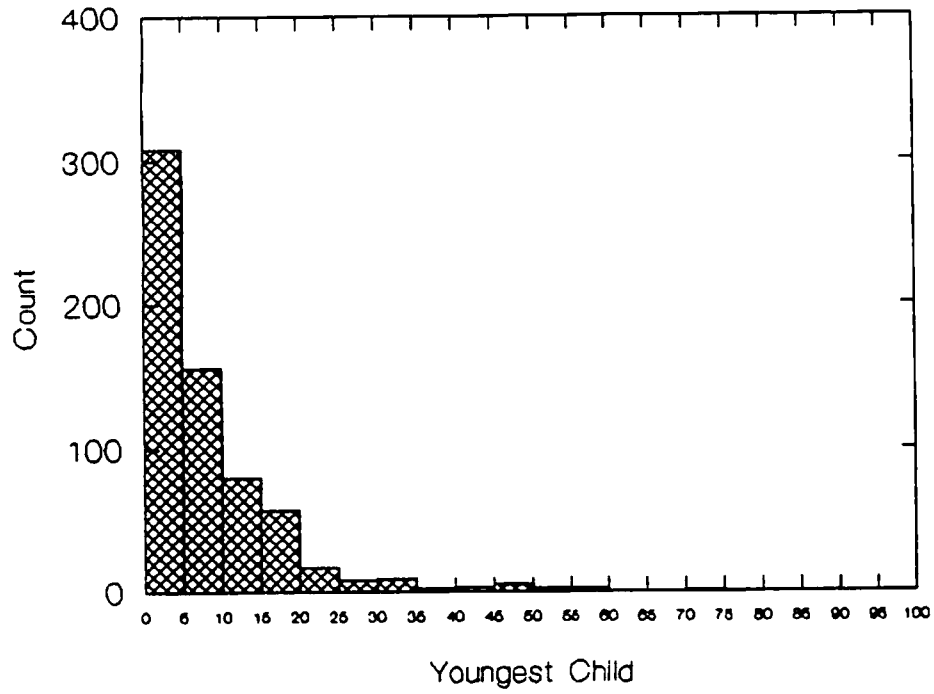


YKID - age of own youngest child
 Constructed.
 Missing data and inapplicable: 99

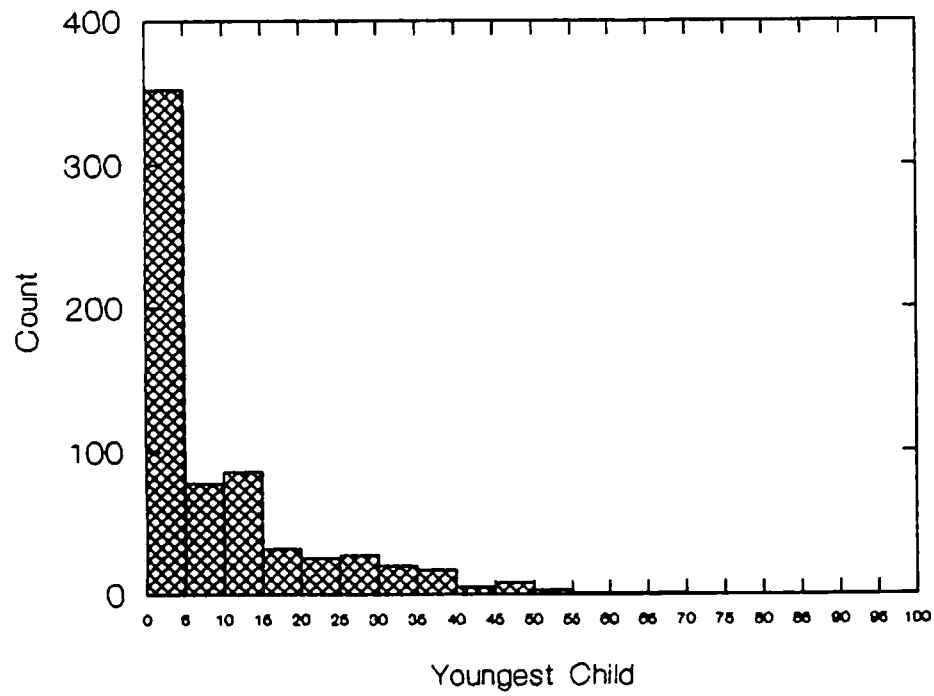
	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
MISS	775	66.24	6310	71.89	1226	65.35	1307	66.55	2055	70.18



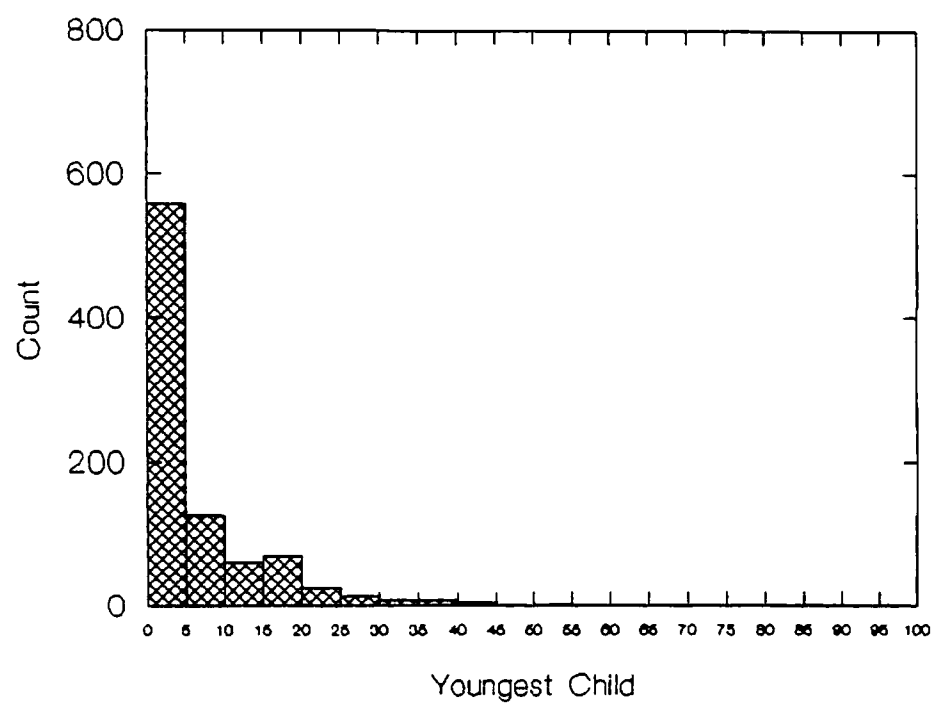
YKID, CROW, 1900



YKID, HOPI, 1900



YKID, WHITE EARTH, 1900



KIDS16 - number of children under 16 in household

Constructed.

Missing data: 99 (if anyone in household has age missing)

	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
0	437	37.35	903	10.29	621	33.10	210	10.69	391	13.35
1	256	21.88	1392	15.86	605	32.25	448	22.81	427	14.58
2	242	20.68	1664	18.96	389	20.74	361	18.38	424	14.48
3	94	8.03	1463	16.67	165	8.80	316	16.09	419	14.31
4	87	7.44	1190	13.56	55	2.93	306	15.58	493	16.84
5	46	3.93	940	10.71	21	1.12	216	11.00	304	10.38
6	8	.68	533	6.07		0.00	87	4.43	241	8.23
7			237	2.70	9	.48	9	.46	127	4.34
8			171	1.95	11	.59		0.00	41	1.40
9			59	.67			11	.56	34	1.16
10			16	.18					14	.48
11			15	.17					13	.44
12			19	.22						
20			26	.30						
99			149	1.70						

OTHERBIA (COLVILLE) - miscellaneous info from 1900 BIA census

Constructed. Character variable.

Missing data: N

BAND (WHITE EARTH). Constructed.

Missing data: 99

NOTE: 97 and 98 were assigned if we knew of why certain people would not be found on the BIA censuses

	VAL	FREQ	PCT
Non-Removal Mille Lacs	0	22	.8
Removal Mille Lacs	1	260	8.9
Gull Lake	2	196	6.7
Removal Fond du Lac	3	70	2.4
Pembina	4	278	9.5
Cass & Winnibigoshish	5	30	1.0
Mississippi	6	997	34.1
Removal White Oak Point	7	51	1.7
Otter Tail Pillager	8	644	22.0
Removal Leech Lake	9	181	6.2
Red Lake	10	7	.2
Non-Minnesota Indian	97	3	.1
Non-Indian	98	72	2.5
Could not find on BIA	99	117	4.0

OTHERBIA (White Earth) - miscellaneous info from BIA censuses

Constructed. Character variable.

Missing data: N

1910

The federal censuses for 1910 Creek, Hopi, White Earth and Colville also are identical to each other in format and follow the census form. All have the same columns for the same variables, in the sequence set by the census form, with our constructed variables at the end. They share most of the codes with 1910 (tribe, occupation, degree of Indian or white blood, etc.) except for codes like town, enumerator, address, which are specific to each data set. Those codes should be looked up in the individual descriptions.

COLVILLE AGENCY CENSUS

These data come from National Archives Microfilm Collection T624, reel 1654 (Ferry County) and reel 1667 (Okanagan County). We collected data for all dwellings on the special Indian forms for Indians in Ferry County and Okanagan County. Two of the 16 enumerators enumerated the reservation. Both of these people frequently excluded white members of the household. W.J. Hall's enumeration sheets could not be found, but Ingram left regular enumeration sheets which included many white spouses. We linked these people to their Indian families when possible. We cross-checked individuals on the 1900 BIA census and used BIA spellings when there were conflicts since Hall's and Ingram's handwriting was so bad. In addition, W.J. Hall probably used the BIA census

list and did not ask the "extra" federal questions. His enumerations have a great deal of missing data and children-ever-born almost always matches children-surviving and children in household. He recorded occupation as "none" for everyone. Mackey Ingram's enumerations were difficult to read. Tribe, for example, could not always be deciphered. Spellings varied wildly making it difficult to link many people either to the 1900 federal census or the BIA enumerations. Finally, village 21 included several families whom Ingram reported as "refused to answer," even though information appears after their names. Overall, Colville 1910 could be the poorest of the data sets.

In general, we tried to cross-check people with the BIA census, but we kept families that looked least like they were taken straight from the BIA rolls (e.g. out of sequence, off reservation or included non-Indian spouses). Indian women whose white husbands were found on the regular census schedules and attached by us to their Indian families included: Alice Vivian, Angeling Armstrong, Sarah Williams, Lucy Snider, Minnie Smith, Mattie Morris and Mary Wetmore.

Number of cases: 1548

CREEK NATION CENSUS

These data come from National Archives Microfilm Collection T624, reels 1265 and 1267. The Creek Nation was too large to code in its entirety. In addition, because the Nation had been abolished by congress there is no BIA census with which to check

the 1910 return. After consulting with advisor John Moore, we collected data for all dwellings on the special Indian forms and for households with at least one Indian on the regular census form for Okmulgee and Okfuskee Counties, which are two of the counties lying within the former boundaries of the Creek Nation.

Number of cases: 2132

CROW AGENCY CENSUS

These data come from National Archives Microfilm Collection T624, reels 837 (Yellowstone county). Theodore Shipley was the enumerator for the reservation.

Number of cases: 1832

HOPÍ AGENCY CENSUS

These data come from National Archives Microfilm Collection T624, reels 39 (Coconino County) and 41 (Navajo County). We collected data for all dwellings on the special Indian forms for the Hopi reservation (excluding those living outside of Hopi villages, Navajos, etc.). Most of the Hopi villages were enumerated by Lee Thayer, a missionary who listed himself as coming originally from Ohio. Thayer's enumeration was not very legible, but it appears detailed and thorough. The ages appeared "heaped," so we entered the Hopi 1910 BIA census as a way of cross-checking the federal list. Theodore Shuflin enumerated Moencapi Village, but his enumeration was sketchy and flawed and should probably not be used for anything other than population

counts (ages and relationships are entirely implausible, for example, when they occur). Shuflin listed everyone as a farmer, even infants.

The census also contains one page of teenagers listed at the end of Walpi Village with no identification of whether they were in school or had been left out of their respective households for some other reason. Their DWELNO and FAMNO are 999; DWELSIZE and FAMSIZE 9 and 99.

Number of cases: 1936

WHITE EARTH AGENCY CENSUS

These data come from National Archives Microfilm Collection T624, reels 689 and 710. We collected data for all dwellings on the special Indian forms and for households with at least one Indian on the regular census form for towns where the enumerator had also written-in "White Earth Reservation."

Number of cases: 3390

Columns for use with 1910 data sets.

1-3	(3)	HHNO*	100	(1)	SCHOOL
(4)	(1)	INDSUPP	101	(1)	OWN
5-6	(2)	TOWN	102	(1)	MORT
7-8	(2)	ENUM	103	(1)	FARM
9-10	(2)	ADDRESS*	104-105	(2)	OTHER*
11-13	(3)	DWELNO*	106-107	(2)	TRIBE*
14	(1)	DWELSIZE	108-109	(2)	FTRIBE*
15-17	(3)	FAMNO*	110-111	(2)	MTRIBE*
18-19	(2)	FAMSIZE	112-113	(2)	IBLOOD
20	(1)	NAMETYPE	114-115	(2)	WBLOOD
21-48	(28)	NAME*	116-117	(2)	BBLOOD
49	(1)	NAME2TYP	118	(1)	NUMMARR
50-68	(19)	NAME2*	119	(1)	POLYG
69-70	(2)	RELATION	120-121	(2)	GRAD
71	(1)	SEX	122	(1)	TAXED
72	(1)	RACE	123-126	(4)	ALLOTYP*
73-74	(2)	AGE	127	(1)	RESIDENT
75	(1)	MARSTA	128	(1)	DWELTYPE
76-77	(2)	YRSMARR	129-130	(2)	FKEY*
78-79	(2)	CHBORN	131-132	(2)	MKEY*
80-81	(2)	CHALIVE	133-134	(2)	SPKEY*
82-83	(2)	BPLACE*	135	(1)	EXT
84-85	(2)	FBPLACE*	136-137	(2)	SPAGE
86-87	(2)	MBPLACE*	138-139	(2)	SPTRIBE*
88-89	(2)	LANG	140-142	(3)	SPOCC
90-92	(3)	OCCUP	143-144	(2)	SPLANG
93	(1)	RATION	145-146	(2)	NUMKIDS
94	(1)	EMPSTAT	147	(1)	NUMCH5
95	(1)	UNEMP	148-149	(2)	OKID1
96-97	(2)	UNEMPWKS	150-151	(2)	OKID2
98	(1)	READ	152-153	(2)	YKID
99	(1)	WRITE	154-155	(2)	KIDS16

* Data not reported on frequency tables or charts

CODES 1910

HHNO - number of household in order of enumeration. Constructed.
Missing data: none

INDSUPP - on supplemental Indian form or regular form?.
Constructed.
Missing data: none
(unavailable for Crow)

	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
1	1548	100.0	1924	90.24	1832	100.0	1936	100.0	3366	99.29
2			208	9.76					24	.71

TOWN (unavailable for Crow)
missing data: none

VAL	COLVILLE	VAL	OKANAGAN COUNTY
	FERRY COUNTY		
1	East Republic Precinct	13	Molson
2	West Republic Precinct	14	Bodie & Chesaw Precincts
3	Curlew Precinct	15	Loomis Precinct
4	Faroda (Pasoda?) Precinct	16	Aeneas Precinct
5	Danville Precinct	17	Okanagan Precinct
6	Orient Precinct	18	Columbia Precinct
7	Malo & Lake Precincts	19	Pateros Precinct
8	Sherman Precinct	20	Okanagan Precinct, part of Colville Res.
9	Keller Precinct	21	Nespelem Precinct, Colville Res.
10	Meteor Precinct	22	Omak Precinct, Colville Res.
11	Keller Precinct, South Half of Colville Res.		
12	Meteor Precinct, South Half of Colville Res.		

VAL	CREEK	VAL	
1	BEARDEN	12	BRYAN
2	BOLEY	13	NATURA
3	CASTLE	14	HAMILTON
4	CREEK TOWNSHIP	15	HENRY
5	MORSE TOWNSHIP	16	MORRIS
6	OKEMAH TOWNSHIP	17	OKMULGEE
7	OKFUSKEE	18	PASCOE
8	PADEN	19	TIGER
9	WELEETKA	20	SCHULTER
10	BALDHILL	21	SINERS
11	BEGGS		

HOPI

1	Sichumovi	114	11.6	6	Tewa	188	9.7
2	Shipaulovi	120	6.2	7	Oraibi	398	20.6
3	Shimopovi	234	12.1	8	Pacabi	120	6.2
4	Walpi	199	10.3	9	Moencapi	175	9.0
5	Meshongnovi	278	14.4				

WHITE EARTH

<u>BECKER COUNTY</u>				<u>MAHNOMEN COUNTY</u>			
1	Callaway Village			21	Beaulieu		
2	Rahm's Subdivision			22	Lagard		
3	Callaway Township			23	Heier		
4	T141 R42			24	T146 R41		
5	White Earth Township			25	T145 R42		
6	Ogema Village			26	Bejou		
7	T142 R42			27	T146 R41		
8	Elbow Lake			28	Chief		
9	White Earth Lake			29	Waubun Village		
10	Pine Point			30	Lake Grove		
11	Round Lake			31	Popple Grove		
12	Flat Lake			32	Mahnomen		
13	Bass Lake			33	Pembina Twnshp		
14	T141 R37			34	Rosedale		
15	T142 R39			35	T143 R40		
16	T142 R40			36	T143 R39		
<u>CLEARWATER COUNTY</u>				37	T144 R39		
17	T144 R38			38	T145 R39		
18	T145 R38			39	T146 R39		
19	T146 R38						
20	T143						

ENUM - enumerator. (unavailable for Crow)

Missing data: none

COLVILLE

1	M.H. Joseph	31	1.9	9	August Peebles	19	1.2
2	Arthur Marsh	14	.9	10	Lester Vincent	14	.9
3	Ralph Hunner	24	1.5	11	Clarence Hurley	6	.4
4	Charles Massie	23	1.4	12	John Evans	9	.6
5	Henry Blaisdell	10	.6	13	Henry Stark	1	.1
6	John McClain	36	2.3	14	William Ford	15	.9
7	Henry Alexander	55	3.5	15	Torry Hatch	16	1.0
8	W.J. Hall	596	37.4	16	Mackey Ingram	723	45.4

CREEK

1 J. Collins
 2 W. Barber
 3 J. Ziegler
 4 B. St. Bye
 5 C. Diehl
 6 T. Litord
 7 C. Stearn
 8 M. Frerich
 9 E. Bass
 10 J. Jones
 11 T. McCullie
 12 C. Cooper
 13 M. Drinker
 14 G. Thomas
 15 J. McGee
 16 A. Pense
 17 C. Wilson
 18 R. Black
 19 N. Bay
 20 D. Wallace

21 J. Gleawen
 22 A. Huntz
 23 T. Colbert
 24 W. Allen
 25 W. Roberts

HOPI

1 Lee Thayer 1761 91.0
 2 Theo. Shuflin 175 9.0

WHITE EARTH

1 Euzebe Bellefeuille
 2 Julius Brown
 3 George Campbell
 4 Alfred Folstrom
 5 Angus McIntosh
 6 Frank Meech
 7 John Grothe
 8 Frank Cajune
 9 Frederick Peake

ADDRESS - street address. (unavailable for Crow)

Missing data: 99

DWELNO - dwelling number as given on form. (unavailable for Crow)

Missing data: 999

DWELSIZE - number of households in dwelling. Constructed.

Missing data: none

(unavailable for Crow)

	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
1	1460	94.32	2034	95.40			1894	97.83	3193	94.19
2	75	4.84	98	4.60			22	1.14	144	4.25
3		0.00						0.00	39	1.15
4	13	.84						0.00		0.00
9		0.00			1832	100.0	20	1.03	14	.41

FAMNO - household number as given on form. (unavailable for Crow)

Missing data: 999

FAMSIZE - number of individuals in the household. Constructed.

Missing data: none

NOTE: Individuals in institutions have a famsize of 99

VAL	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
1	93	6.01	17	.80	223	12.17	13	.67	38	1.12
2	218	14.08	144	6.75	428	23.36	62	3.20	208	6.14
3	192	12.40	246	11.54	332	18.12	96	4.96	321	9.47
4	280	18.09	280	13.13	316	17.25	168	8.68	476	14.04
5	260	16.80	410	19.23	265	14.47	265	13.69	445	13.13
6	156	10.08	258	12.10	132	7.21	305	15.75	396	11.68
7	112	7.24	287	13.46	42	2.29	287	14.82	420	12.39
8	120	7.75	184	8.63	56	3.06	200	10.33	336	9.91
9	72	4.65	126	5.91	27	1.47	144	7.44	198	5.84
10	10	.65	60	2.81		0.00	110	5.68	150	4.42
11	22	1.42	44	2.06	11	.60	66	3.41	154	4.54
12	13	.84	36	1.69			36	1.86	96	2.83
13			26	1.22				0.00	78	2.30
14			14	.66				0.00	42	1.24
15							15	.77	30	.88
16							48	2.48		
21							21	1.08		
22							22	1.14		
28							28	1.45		
30							30	1.55		
99							20	1.03	2	.06

NAME TYPE - Indian or European influence? Constructed.

Missing data: 9

(unavailable for Crow)

VAL	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
1	1273	82.24	2131	99.95			82	4.24	3116	91.92
2	250	16.15	1	.05			1851	95.61	273	8.05
9	25	1.61			1832	100.0	3	.15	1	.03

NAME (Indian name for Crow)

Character variable.

Missing data: N

NAME2TYP - type of other name, if given. Constructed.

Missing data: 9

(unavailable for Crow)

VAL	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
1	25	1.61					671	34.66	1	.03
2	3	.19					4	.21	1	.03
9	1520	98.19	2132	100.0	1832	100.0	1261	65.13	3388	99.94

NAME2 - second name, if given (English name for Crow)
 Character variable. Constructed.
 Missing data: N

RELATION - relationship to head of household
 Missing data: 99

VAL	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
1	456	29.46	456	21.39	719	39.25	334	17.25	693	20.44
2	264	17.05	367	17.21	415	22.65	277	14.31	573	16.90
3	636	41.09	909	42.64	611	33.35	817	42.20	1684	49.68
4	18	1.16	87	4.08	57	3.11	8	.41	60	1.77
5			2	.09	7	.38			17	.50
10	18	1.16	13	.61			42	2.17	21	.62
11	54	3.49	56	2.63	4	.22	146	7.54	67	1.98
12							3	.15	2	.06
13							4	.21		
14							7	.36	1	.03
20	21	1.36	11	.52			8	.41	20	.59
21	2	.13							1	.03
22	12	.78	17	.80			53	2.74	13	.38
23	4	.26					3	.15	2	.06
24							5	.26		
26	1	.06								
30	17	1.10	21	.98	9	.49	18	.93	29	.86
31			5	.23					5	.15
32									1	.03
33	4	.26	27	1.27			60	3.10	25	.74
40			1	.05			15	.77	5	.15
41							1	.05		
42	11	.71	33	1.55	7	.38	70	3.62	31	.91
43			1	.05			1	.05	1	.03
45			1	.05			13	.67	4	.12
50	1	.06	16	.75			3	.15	6	.18
51							1	.05		
70	2	.13	35	1.64			6	.31	72	2.12
71			4	.19					1	.03
75			16	.75					30	.88
76									1	.03
78	10	.65	42	1.97					6	.18
79			3	.14					2	.06
80	6	.39	1	.05						
81	1	.06							6	.18
83	1	.06								
86									1	.03
87			1	.05					6	.18
88									3	.09
90			1	.05						
96							1	.05		
97							1	.05		
98	5	.32								
99	4	.26	6	.28	3	.16	39	2.01	1	.03

SEX

Missing data: 9

	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
1	766	49.48	1098	51.50	908	49.56	1004	51.86	1738	51.27
2	776	50.13	1034	48.50	923	50.38	932	48.14	1652	48.73
9	6	.39			1	.05				

RACE

Missing data: 9

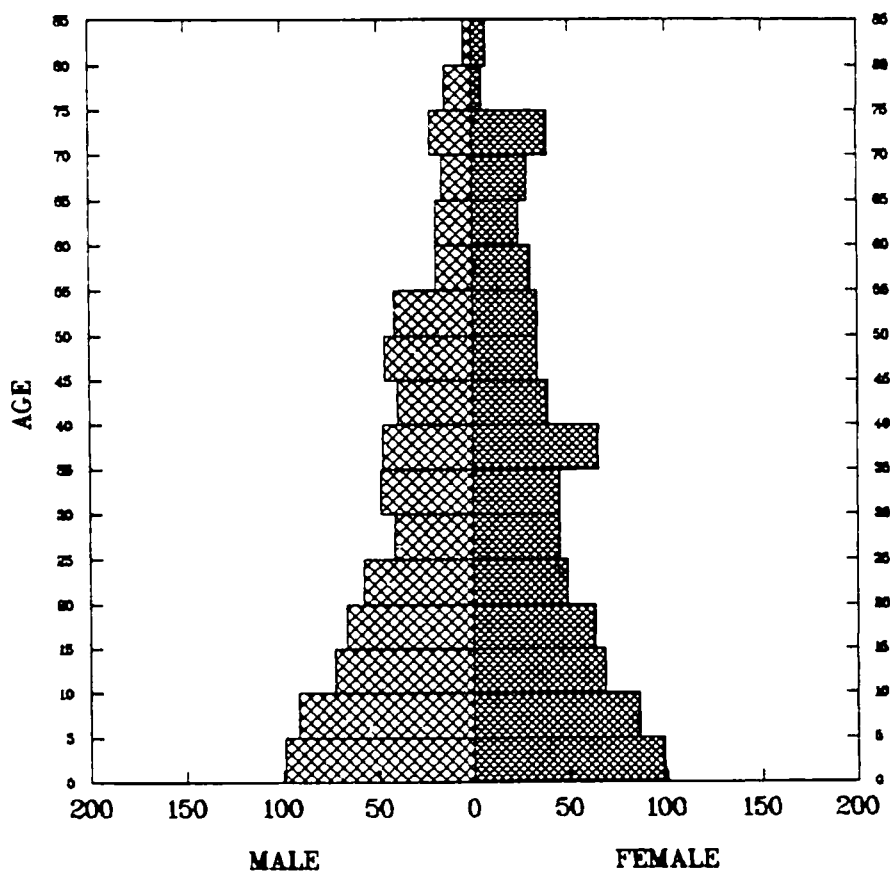
	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
1	29	1.87	198	9.29	3	.16			222	6.55
2		0.00	28	1.31	1	.05			1	.03
3	1519	98.13	1882	88.27	1828	99.78	1936	100.0	3167	93.42
5			24	1.13						

AGE

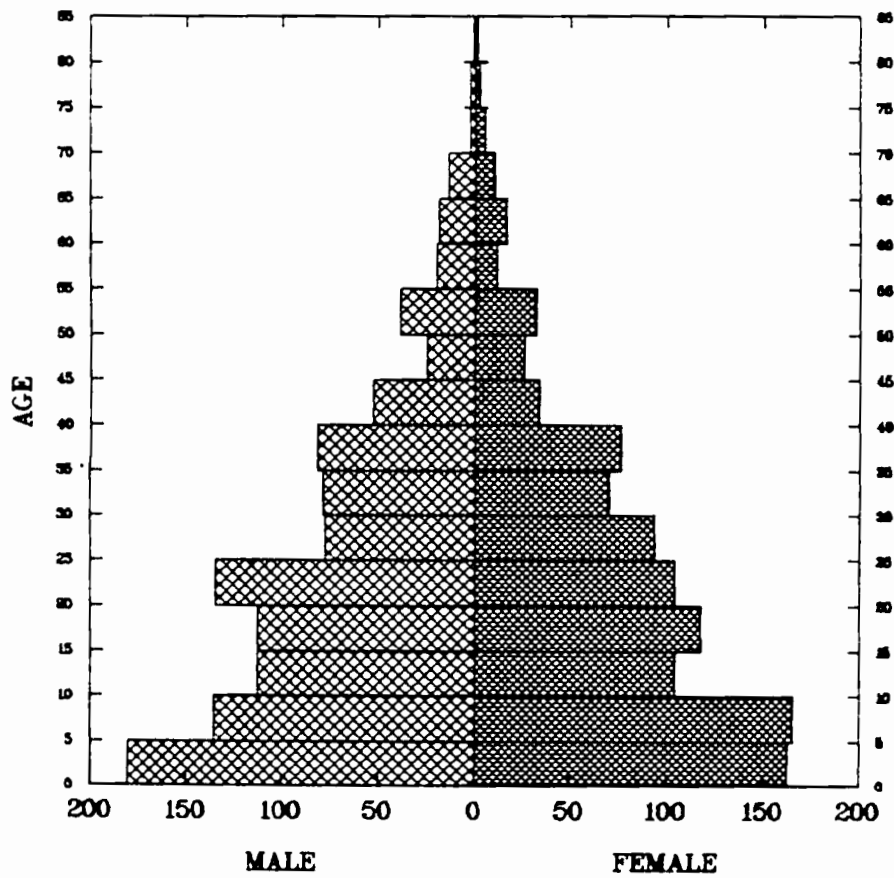
Missing data: 99

	COLVILLE	CREEK	CROW	HOPI	WHITE EARTH
MISSING	20	9	0	1	2
MISS %	1.3	.4	0.0	.1	.05

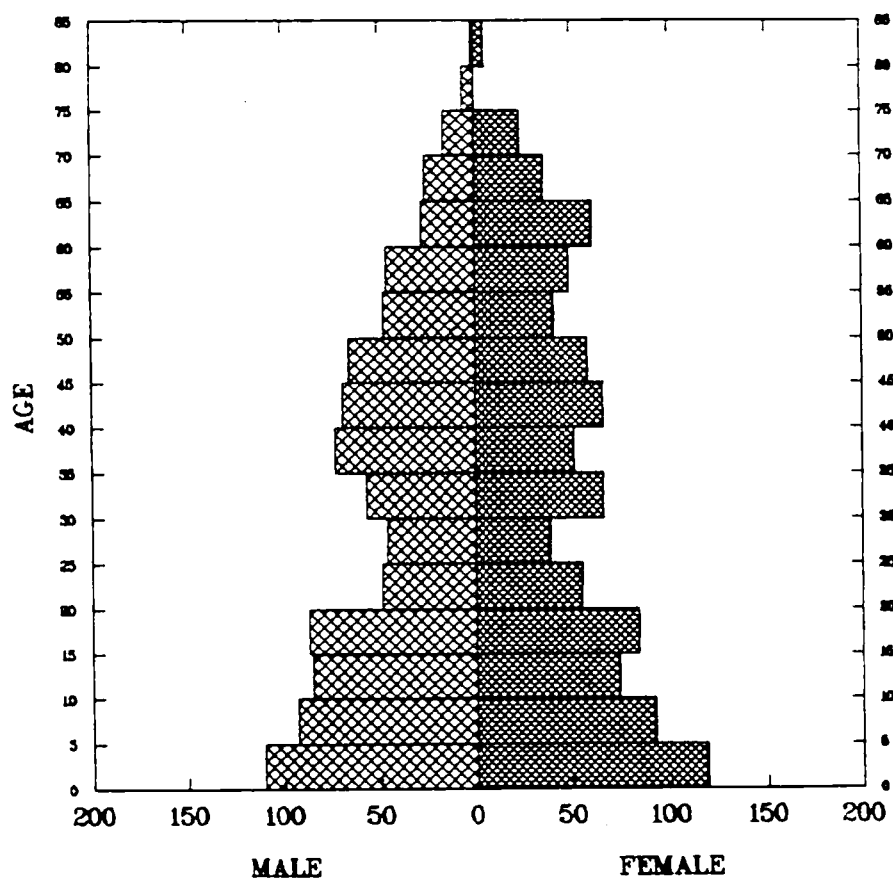
AGE STRUCTURE, COLVILLE, 1910



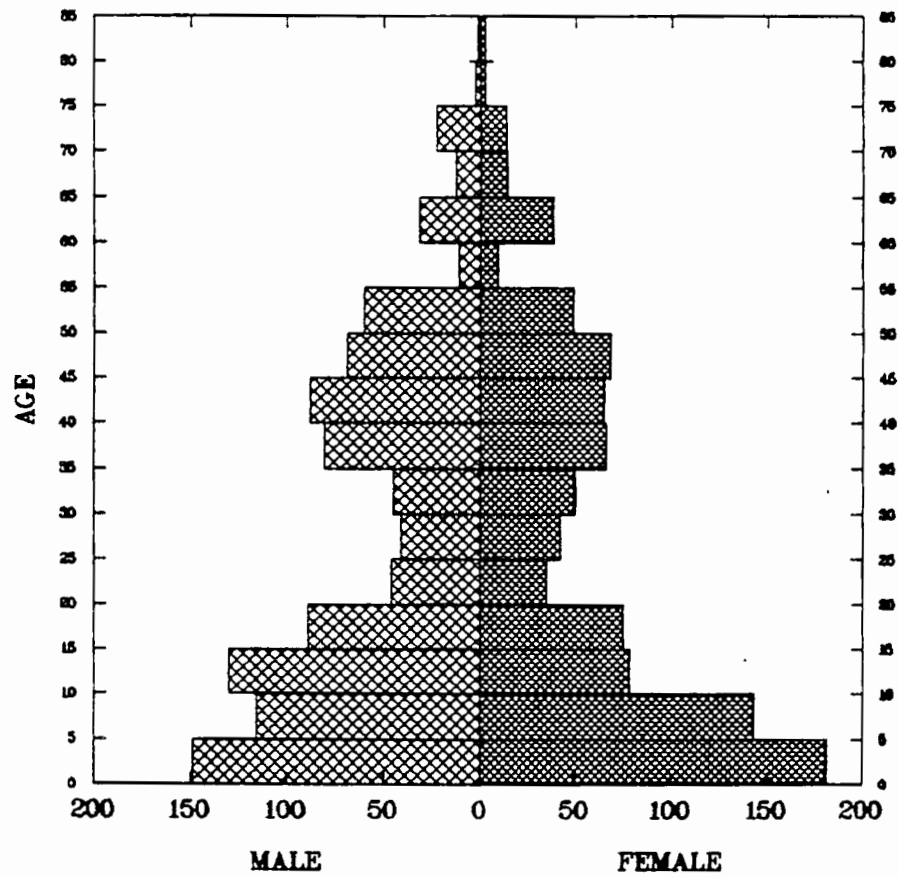
AGE STRUCTURE, CREEK, 1910



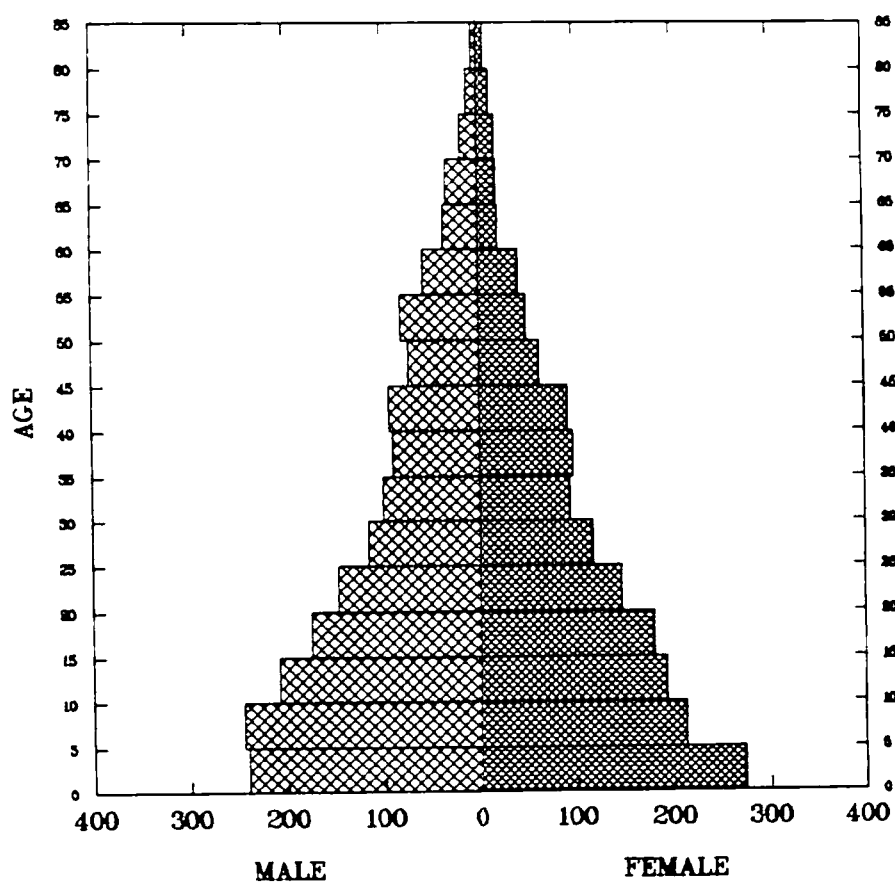
AGE STRUCTURE, CROW, 1910



AGE STRUCTURE, HOPI, 1910



AGE STRUCTURE, WHITE EARTH, 1910



MARSTA - marital status

Missing data: 9

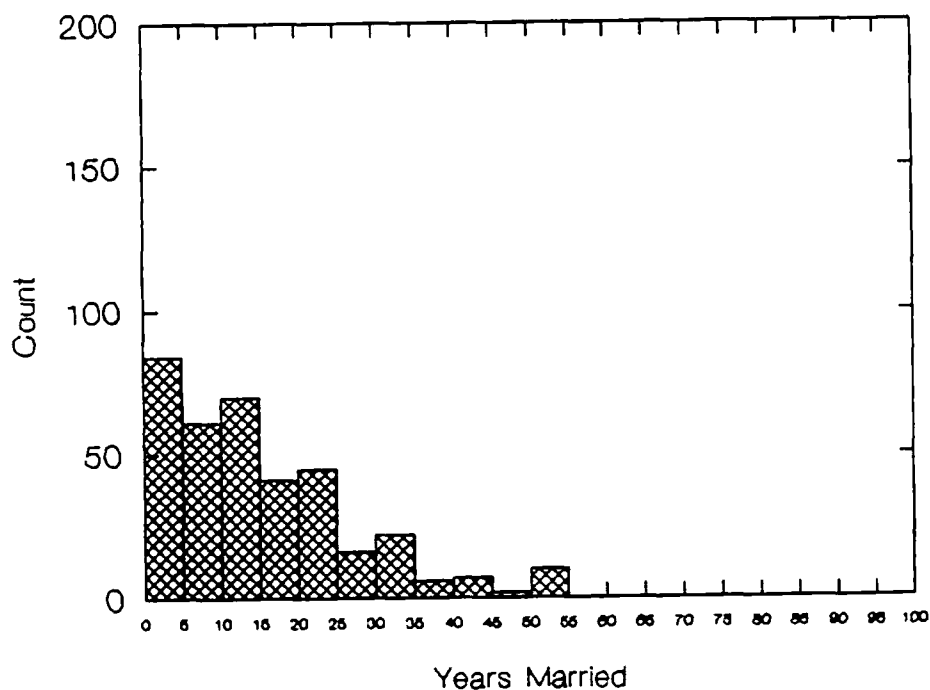
	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
1	570	36.82	756	35.46	826	45.09	713	36.83	1202	35.46
2	43	2.78	33	1.55	60	3.28	10	.52	45	1.33
3	179	11.56	120	5.63	161	8.79	119	6.15	153	4.51
4	11	.71	8	.38	11	.60	84	4.34	19	.56
5	733	47.35	1214	56.94	774	42.25	1007	52.01	1969	58.08
9	12	.78	1	.05			3	.15	2	.06

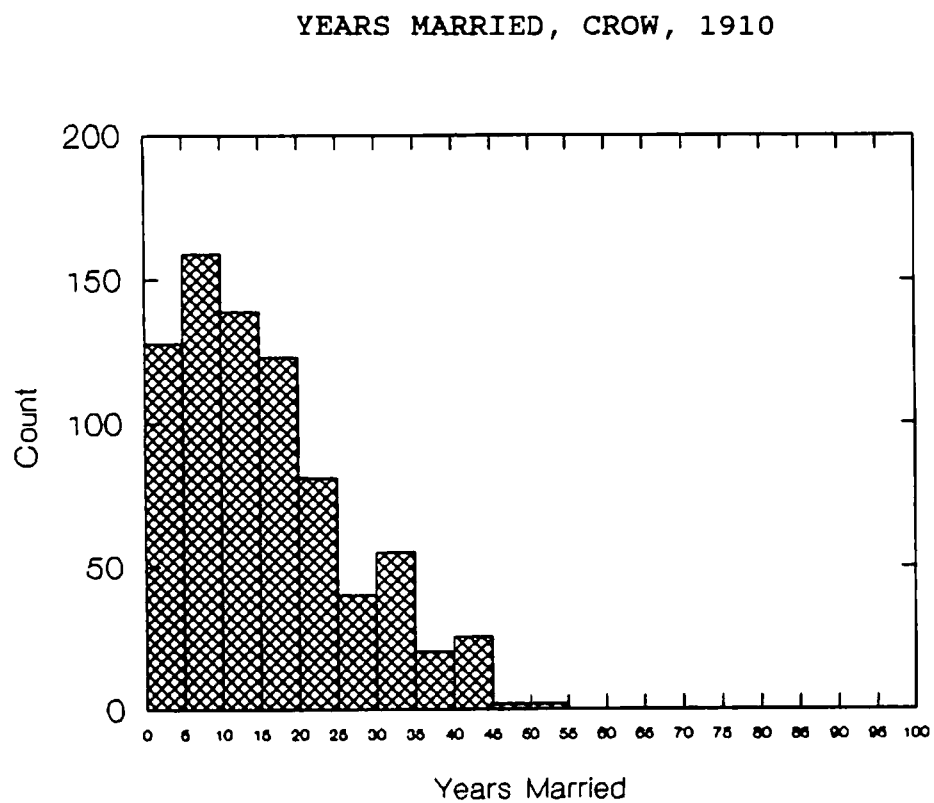
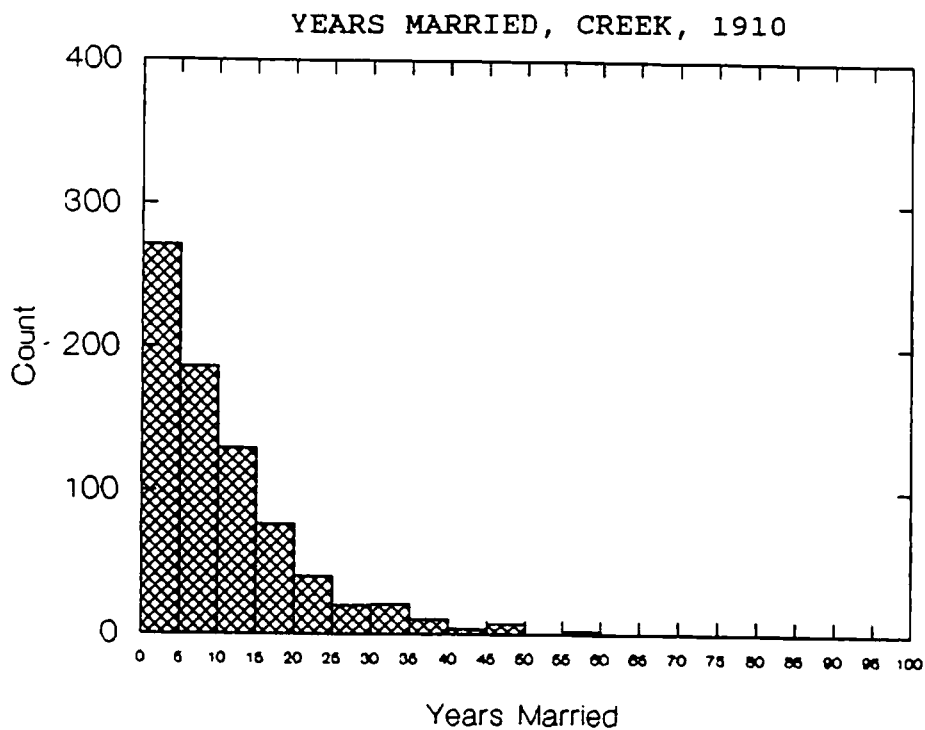
YRSMARR - number of years married to current spouse

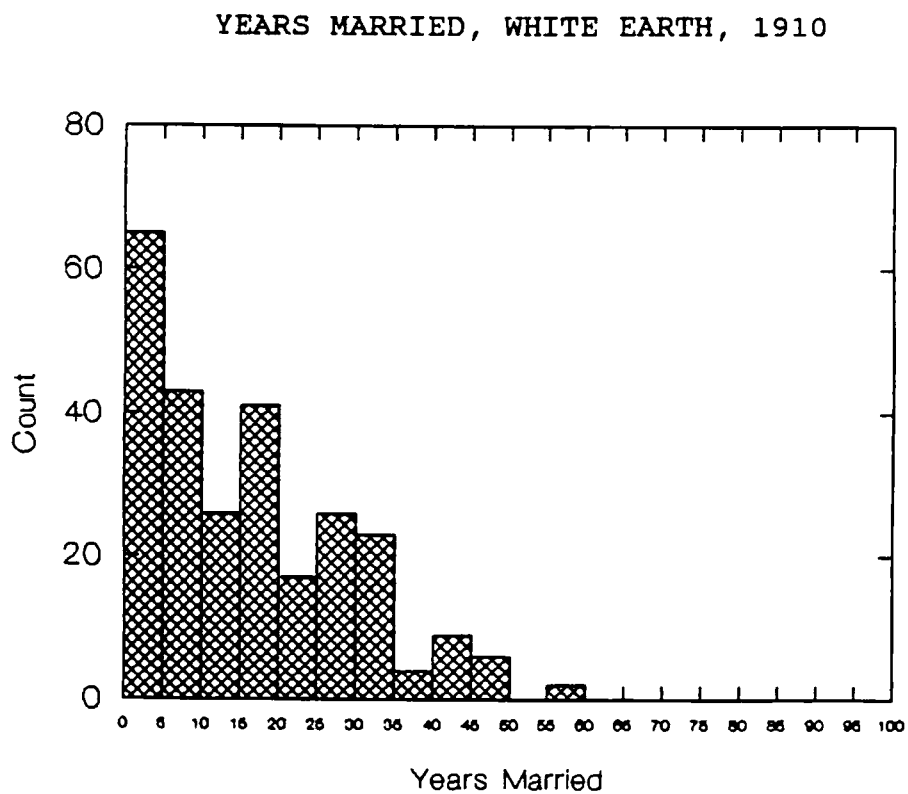
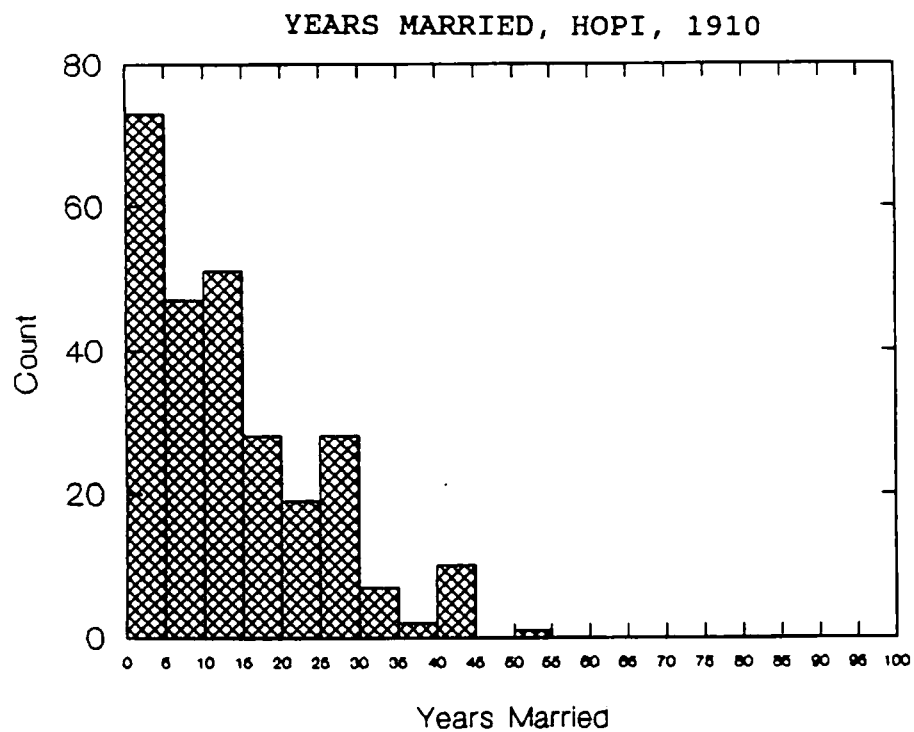
Missing data and inapplicable: 99

	COL-VILLE	CREEK	CROW	HOPI	WHITE EARTH
MISSING	1184	1365	1058	1670	2161
MISS %	76.49	64.02	57.75	86.26	63.75

YEARS MARRIED, COLVILLE, 1910







CHBORN - children ever born

Missing data and inapplicable: 99

VAL	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
0	77	4.97	53	2.49	8	.44	31	1.60	33	.97
1	50	3.23	72	3.38	45	2.46	32	1.65	66	1.95
2	58	3.75	52	2.44	53	2.89	36	1.86	92	2.71
3	54	3.49	47	2.20	60	3.28	38	1.96	71	2.09
4	45	2.91	40	1.88	67	3.66	42	2.17	62	1.83
5	27	1.74	45	2.11	43	2.35	28	1.45	43	1.27
6	30	1.94	22	1.03	27	1.47	32	1.65	61	1.80
7	20	1.29	23	1.08	19	1.04	34	1.76	33	.97
8	18	1.16	17	.80	14	.76	14	.72	45	1.33
9	8	.52	20	.94	5	.27	18	.93	33	.97
10	13	.84	9	.42	8	.44	18	.93	31	.91
11	5	.32	3	.14	4	.22	9	.46	29	.86
12	7	.45	6	.28		0.00	10	.52	20	.59
13	1	.06	2	.09	1	.05	4	.21	12	.35
14	2	.13	3	.14			1	.05	5	.15
15	3	.19	1	.05			2	.10	2	.06
16			1	.05			1	.05	4	.12
17								0.00	3	.09
19							1	.05		
99	1130	73.00	1716	80.49	1478	80.68	1585	81.87	2745	80.97

CHALIVE - children still alive

Missing data and inapplicable: 99

VAL	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
0	112	7.24	58	2.72	37	2.02	42	2.17	45	1.33
1	103	6.65	101	4.74	117	6.39	77	3.98	103	3.04
2	81	5.23	72	3.38	74	4.04	66	3.41	123	3.63
3	59	3.81	67	3.14	56	3.06	84	4.34	81	2.39
4	27	1.74	38	1.78	41	2.24	60	3.10	66	1.95
5	13	.84	25	1.17	12	.66	34	1.76	59	1.74
6	14	.90	17	.80	7	.38	14	.72	51	1.50
7	8	.52	11	.52	4	.22	16	.83	34	1.00
8	4	.26	8	.38	1	.05	5	.26	26	.77
9		0.00	7	.33	3	.16	1	.05	14	.41
10	2	.13		0.00					8	.24
11			1	.05					10	.29
12			2	.09						0.00
13									3	.09
99	1125	72.67	1725	80.91	1480	80.79	1537	79.39	2767	81.62

BPLACE - birthplace

Missing data: 99

FBPLACE - father's birthplace

Missing data: 99

MBPLACE - mother's birthplace

Missing data: 99

LANG - if unable to speak English, what language is spoken?

Missing data: 99 (for those over 10, by implication English is spoken)

	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
1	437	28.23		0.00					48	1.42
2		0.00	550	25.80						
3		0.00	1	.05						
4		0.00	1	.05						
5	1	.06								
6		0.00							432	12.74
7	15	.97								
8	1	.06								
9	7	.45								
10	11	.71								
11	1	.06								
12							1116	57.64		
13							3	.15		
20	3	.19							8	.24
70					929	50.71				
71					1	.05				
98	788	50.90	1054	49.44	796	43.45	536	27.69	2057	60.68
99	284	18.35	526	24.67	102	5.57	281	14.51	845	24.93

OCCUP - occupation

Missing data: 998 illegible

999 missing

	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
0	755	48.77	949	44.51	541	29.53	661	34.14	2484	73.27
50	218	14.08	426	19.98	298	16.27	529	27.32	230	6.78
100	4	.26	3	.14			287	14.82	51	1.50
140			1	.05					1	.03
150	2	.13	1	.05	26	1.42	5	.26	53	1.56
200			19	.89	4	.22	2	.10	28	.83
250			6	.28					13	.38
260	10	.65	45	2.11	194	10.59	6	.31	50	1.47
300	22	1.42	13	.61	91	4.97			261	7.70
310	4	.26	2	.09					6	.18
320	4	.26	14	.66	17	.93	4	.21	81	2.39
400	1	.06	23	1.08	1	.05	12	.62	43	1.27
500			2	.09	1	.05			15	.44
550									7	.21
600	3	.19	3	.14					32	.94
700					7	.38				
999	525	33.91	625	29.32	430	35.59	430	22.21	35	1.03

RATION - does Indian receive government rations?

(unavailable for Crow)

Missing data: none

Inapplicable: 2 (for no)

	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
1	2	.13	3	.14					3036	89.56
2	1546	99.87	2129	99.86	1832	100.0	1936	100.0	354	10.44

EMPSTAT - employment status

Missing data/inapplicable: 9

	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
1	9	.58	82	3.85	9	.49	798	41.22	86	2.54
2	103	6.65	247	11.59	259	14.14		0.00	191	5.63
3	135	8.72	215	10.08	163	8.90	34	1.76	593	17.49
9	1301	84.04	1588	74.48	1401	76.47	1104	57.02	2520	74.34

UNEMP - whether unemployed on Apr 15, 1910. (unavailable for Crow)

Missing data/inapplicable: 9

	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
1	9	.58	9	.42				0.00	97	2.86
2	145	9.37	143	6.71			37	1.91	534	15.75
9	1394	90.05	1980	92.87	1832	100.0	1899	98.09	2759	81.39

UNEMPWKS - number of weeks NOT employed in past year

Missing data/inapplicable: 99

(unavailable for Crow)

	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
0	30	1.94	110	5.16			15	.77	320	9.44
1	1	.06								
2	10	.65							1	.03
3	4	.26	2	.09					1	.03
4	15	.97	1	.05			1	.05	3	.09
5	8	.52							3	.09
6	8	.52	1	.05					7	.21
7	7	.45							2	.06
8	1	.06	1	.05					10	.29
9			1	.05					1	.03
10	1	.06	4	.19					13	.38
11									1	.03
12	4	.26	4	.19					13	.38
13									9	.27
14			1	.05					11	.32
15									11	.32

UNEMPWKS (cont.)

VAL	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
16	2	.13	1	.05					11	.32
17									3	.09
18									10	.29
19									1	.03
20	4	.26	1	.05					13	.38
21									2	.06
22									4	.12
23	2	.13							3	.09
24			1	.05					4	.12
25	1	.06	1						6	.18
26									9	.27
27									3	.09
28	1	.06								
30									3	.09
32									6	.18
33									2	.06
34									4	.12
35									1	.03
36									1	.03
40			1	.05					11	.32
41									1	.03
42									1	.03
46									2	.06
48									1	.03
52									7	.21
99	1449	93.60	2002	93.90	1832	100.0	1920	99.17	2875	84.81

READ - can individual read (any language)?

Missing data and inapplicable: 9

VAL	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
1	305	19.70	985	46.20	622	33.95	558	28.82	1855	54.72
2	255	16.47	573	26.88	906	49.45	1067	55.11	615	18.14
9	988	63.82	574	26.92	304	16.59	311	16.06	920	27.14

WRITE - can individual write?

Missing data and inapplicable: 9

VAL	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
1	306	19.77	964	45.22	619	33.79	544	28.10	1830	53.98
2	254	16.41	586	27.49	897	48.96	1079	55.73	638	18.82
9	988	63.82	582	27.30	316	17.25	313	16.17	922	27.20

SCHOOL - anyone who attended school since Sept. 1, 1909
Missing data and inapplicable: 9

	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
1	146	9.43	374	17.54	294	16.05	491	25.36	860	25.37
2	282	18.22	261	12.24	132	7.21	300	15.50	365	10.77
9	1120	72.35	1497	70.22	1406	76.75	1145	59.14	2165	63.86

OWN - is home owned or rented?
Missing data and inapplicable: 9

	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
1	198	12.79	387	18.15			331	17.10	465	13.72
2	6	.39	86	4.03			1	.05	158	4.66
9	1344	86.82	1659	77.81			1604	82.85	2767	81.62

MORT - is home mortgaged? (unavailable for Crow)
Missing data and inapplicable: 9

	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
1	159	10.27	326	15.29			331	17.10	362	10.68
2		0.00	24	1.13				0.00	67	1.98
9	1389	89.73	1782	83.58	1832	100.0	1605	82.90	2961	87.35

FARM - is home a house or farm? (unavailable for Crow)
Missing data and inapplicable: 9

	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
1	143	9.24	285	13.37			298	15.39	169	4.99
2	301	19.44	134	6.29			35	1.81	515	15.19
9	1104	71.32	1713	80.35	1832	100.0	1603	82.80	2706	79.82

OTHER - miscellaneous. (unavailable for Crow)
Constructed (from army/navy & disability questions).
Missing data: 99

SUPPLEMENTAL QUESTIONS ON INDIAN FORM

TRIBE
Missing data/inapplicable: 99

FTRIBE - father's tribe
Missing data and inapplicable: 99

MTRIBE - mother's tribe
Missing data: 99

IBLOOD - degree of Indian blood
Missing data and inapplicable: 99

	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
NONE	29	1.87	149	6.99	23	1.26		0.00	211	6.24
1/4	147	9.49	326	15.29	79	4.31		0.00	1069	31.53
1/2	303	19.58	183	8.58	209	11.41	1	.05	1113	32.83
3/4	50	3.23	171	8.02	73	3.98		0.00	353	10.41
3/4+		0.00	49	2.29		0.00		0.00	145	4.28
FULL	1003	64.79	1044	48.97	1448	79.04	1935	99.95	460	13.57
MISS	16	1.03	210	9.85		0.00		0.00	39	1.05

WBLOOD - degree of white blood
Missing data and inapplicable: 99

	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
NONE	1004	64.86	1196	56.10	1465	79.97	1935	100.0	473	13.95
1/4	37	2.39	169	7.93	71	3.88			498	14.69
1/2	296	19.12	122	5.72	206	11.24			944	27.85
3/4	125	8.07	103	4.83	74	4.04			690	20.35
3/4+	39	2.52	201	9.43	6	.33			640	18.88
FULL	29	1.87	132	6.19	10	.55			209	6.17
MISS	18	1.16	209	9.80		0.00			36	1.06

BBLOOD - degree of black blood
Missing data and inapplicable: 99

	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
NONE	1527	98.64	1732	81.24	1819	98.67	1936	100.0	3345	98.67
1/4		0.00	65	3.05	3	.29			15	.44
1/2		0.00	69	3.24	9	.15				0.00
3/4		0.00	36	1.64		0.00				0.00
3/4+	1	.06	5	.23		0.00				0.00
FULL		0.00	14	.66	1	.03			1	.03
MISS	20	1.16	211	9.90		0.00			29	.86

NUMMARR - number of times married
Missing data and inapplicable: 9

	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
0	42	2.71	187	8.77		0.00	1	.05	6	.18
1	339	21.90	520	24.39	292	15.94	602	31.10	1099	32.42
2	75	4.84	181	8.49	249	13.59	190	9.81	213	6.28
3	9	.58	34	1.59	116	6.33	49	2.53	17	.50
4			9	.42	70	3.82	9	.46	8	.24
5			1	.05	30	1.64	2	.10	1	.03
6					24	1.31	3	.15		
7					32	1.75				
8					27	1.47				
9	1083	69.96	1200	56.29	992	54.15	1080	55.79	2046	60.35

POLYG - is individual living in polygamy?

Missing data and inapplicable: 9

VAL	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
					963	52.57				
1		0.00	2	.09	2	.11	955	49.33		0.00
2	668	43.15	462	21.67	863	47.11		0.00	845	24.93
3		0.00	1	.05	2	.11		0.00		0.00
9	880	56.85	1667	78.19	2	.11	981	50.67	2545	75.07

GRAD - graduate of which educational institution

Missing data (by implication not a graduate) and inapplicable: 99

TAXED - individual taxed?

Missing data and inapplicable: 9

VAL	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
1	75	4.84	881	41.32			718	37.09	1365	40.27
2	714	46.12	404	18.95			1131	58.42	678	20.00
9	759	49.03	847	39.73	1832	100.0	87	4.49	1347	39.73

ALLOTYR - year of receiving land allotment, if any

Missing data and inapplicable: 9999

RESIDENT - residing on own lands?

Missing data and inapplicable: 9

VAL	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
1	127	8.20	392	18.39	418	22.82	176	9.09	345	10.18
2	617	39.86	649	30.44	243	13.26	313	16.17	1846	54.45
9	804	51.94	1091	51.17	1171	63.92	1447	74.74	1199	35.37

DWELTYPE - aboriginal or civilized?

Missing data and inapplicable: 9

VAL	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
1	468	30.23	1869	87.66	1213	66.21	210	10.85	3286	96.93
2	12	.78	6	.28	169	9.22	1551	80.11	3	.09
9	1068	68.99	257	12.05	450	24.56	175	9.04	101	2.98

CONSTRUCTED VARIABLES

FKEY - position of individual's father in household

Missing data: 99

MKEY - position of individual's mother in household

Missing data: 99

SPKEY - position of individual's spouse in household
Missing data: 99

EXT - is family of head extended?

Missing data: 9

Inapplicable: 8 (not related to household head)

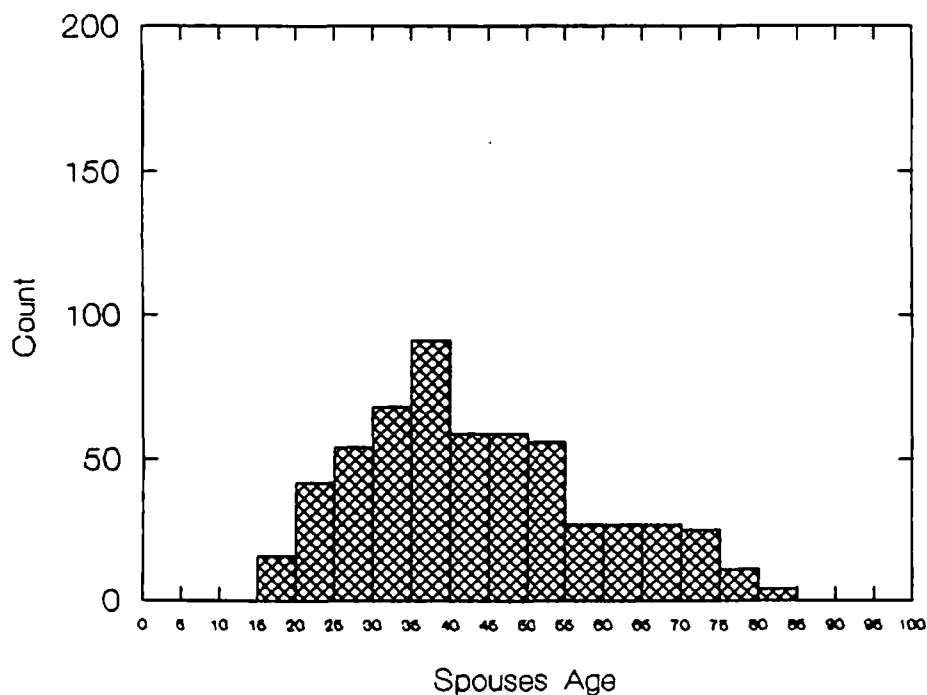
	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
0	1142	73.77	1395	65.43	1779	97.11	648	33.47	2514	74.16
1	242	15.63	232	10.88	11	.60	592	30.58	370	10.91
2	56	3.62	267	12.52	35	1.91	308	15.91	244	7.20
3	66	4.26	99	4.64		0.00	281	14.51	132	3.89
8	20	1.29	102	4.78		0.00	6	.31	128	3.78
9	22	1.42	37	1.74	7	.38	101	5.22	2	.06

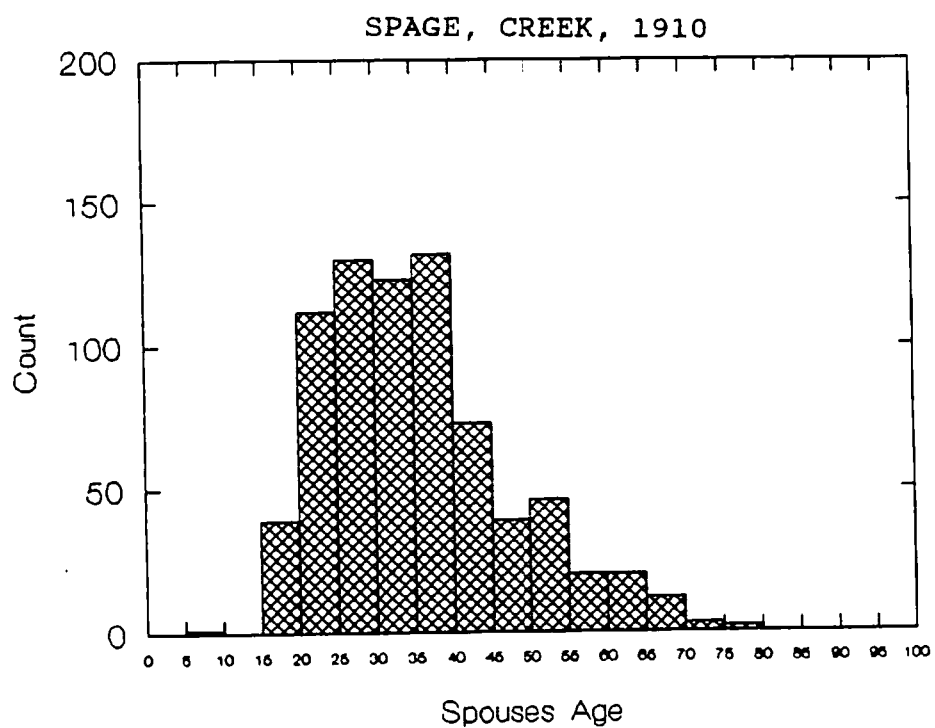
SPAGE - spouse's age

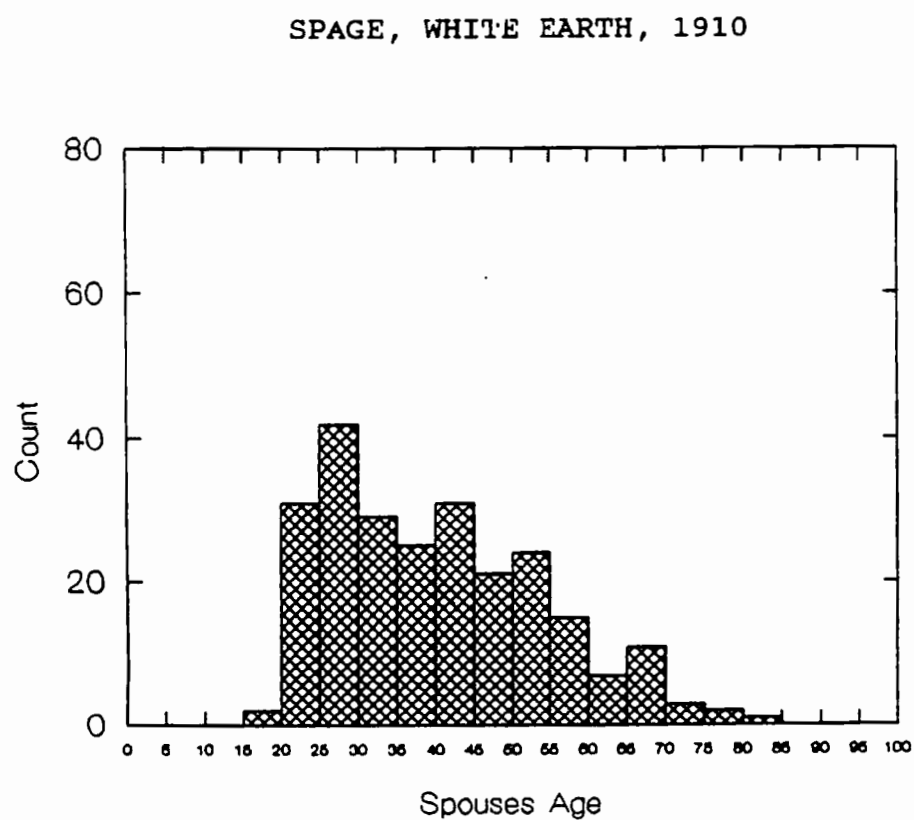
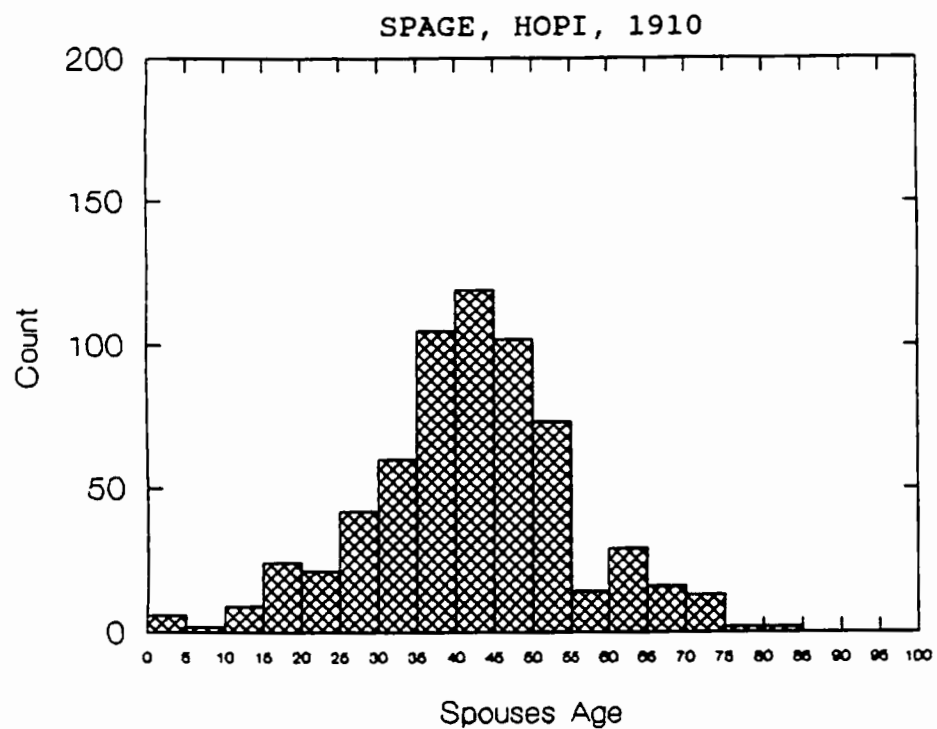
Missing data and inapplicable: 9

	COL- VILLE	CREEK	CROW	HOPI	WHITE EARTH
MISSING	982	1380	1002	1297	2189
MISS %	63.44	64.73	54.69	66.99	6457

SPAGE, COLVILLE, 1910







SPTRIBE - spouse's tribe or race if non-Indian
Constructed.

Missing data and inapplicable: 99

SPOCC - spouse's occupation
Constructed.

Missing data and inapplicable: 999

VAL	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
0	270	17.44	246	11.54	199	10.86	119	6.15	651	19.20
50	134	8.66	262	12.29	243	13.26	249	12.86	160	4.72
100	4	.26	3	.14			226	11.67	39	1.15
140			1	.05					1	.03
150	2	.13	1	.05	24	1.31	2	.10	27	.80
200			7	.33					14	.41
250			5	.23					7	.21
260	4	.26	25	1.17	175	9.55	3	.15	5	.15
300	9	.58	3	.14	54	2.95			173	5.10
310	3	.19	2	.09					2	.06
320	2	.13	5	.23	9	.49	3	.15	49	1.45
400	1	.06	16	.75	1	.05	4	.21	32	.94
500			1	.05	1	.05			8	.24
550									4	.12
600	1	.06	2	.09					23	.68
700					3	.16				
999	1118	72.22	1553	72.84	1123	61.30	1330	68.70	2195	64.75

SPLANG - spouse's ability to speak English
Constructed.

Missing data and inapplicable: 99

VAL	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
1	246	15.89							28	.83
2			260	12.20						
3			1	.05						
4			1	.05						
5	1	.06								
6									256	7.55
7	8	.52								
8	1	.06								
9	4	.26								
10	7	.45								
12							499	25.77		
20	1	.06							5	.15
70					586	31.99				
71					1	.05				
98	267	17.25	488	22.89	235	12.83	131	6.77	910	26.84
99	1013	65.44	1382	64.82	1010	55.13	1306	67.46	2191	64.63

NUMKIDS - number of own kids in household
 Constructed.
 Missing data: none

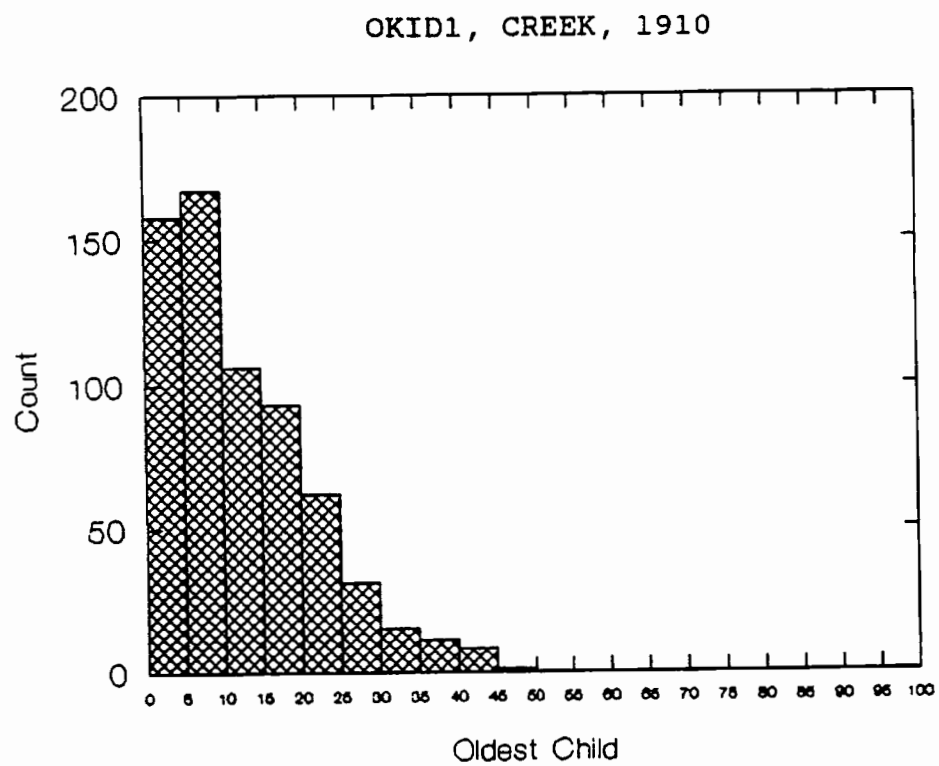
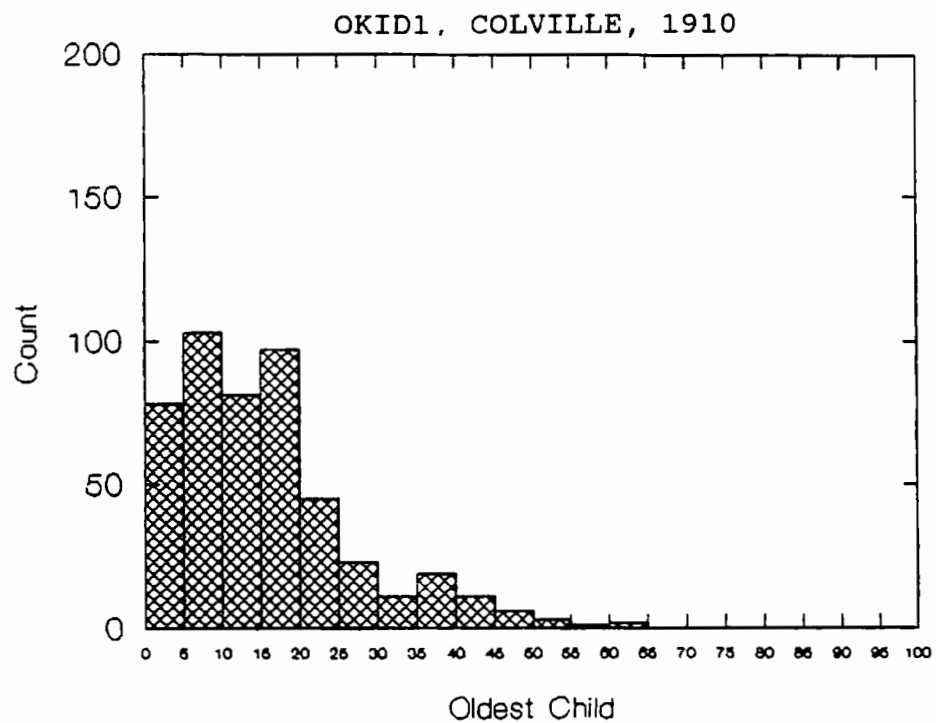
	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
0	1062	68.60	1478	69.32	1316	71.83	1319	68.13	2349	69.29
1	165	10.66	211	9.90	217	11.84	184	9.50	277	8.17
2	138	8.91	149	6.99	150	8.19	124	6.40	214	6.31
3	89	5.75	125	5.86	89	4.86	125	6.46	173	5.10
4	39	2.52	71	3.33	35	1.91	93	4.80	123	3.63
5	25	1.61	40	1.88	5	.27	53	2.74	93	2.74
6	20	1.29	32	1.50	13	.71	19	.98	66	1.95
7	6	.39	9	.42	3	.16	11	.57	44	1.30
8	3	.19	7	.33	2	.11	8	.41	16	.47
9		0.00	6	.28	2	.11			21	.62
10	1	.06	2	.09					8	.24
11			2	.09					6	.18

NUMCH5 - number of own kids under 5 in household
 Constructed.
 Missing data: 9 (if any child's age is missing)

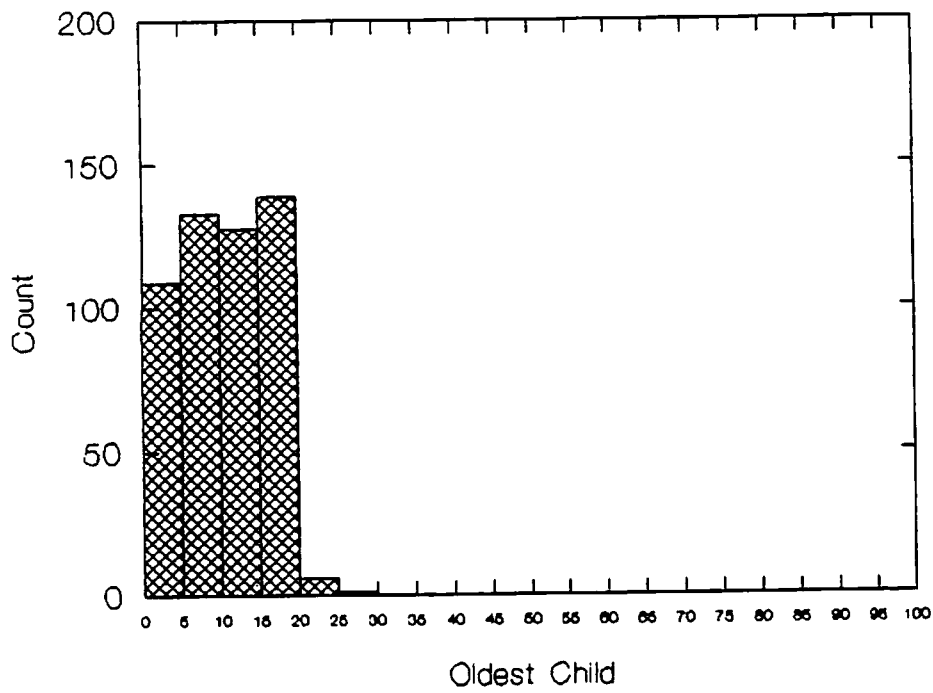
	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
0	1299	83.91	1729	81.10	1535	83.79	1586	81.92	2813	82.98
1	163	10.53	230	10.79	220	12.01	201	10.38	280	8.26
2	65	4.20	135	6.33	63	3.44	137	7.08	225	6.64
3	14	.90	34	1.59	14	.76	10	.52	64	1.89
4	1	.06	2	.09					8	.24
9	6	.39	2	.09			2	.10		

OKID1 - age of own oldest child in household
 Constructed.
 Missing data and inapplicable: 99

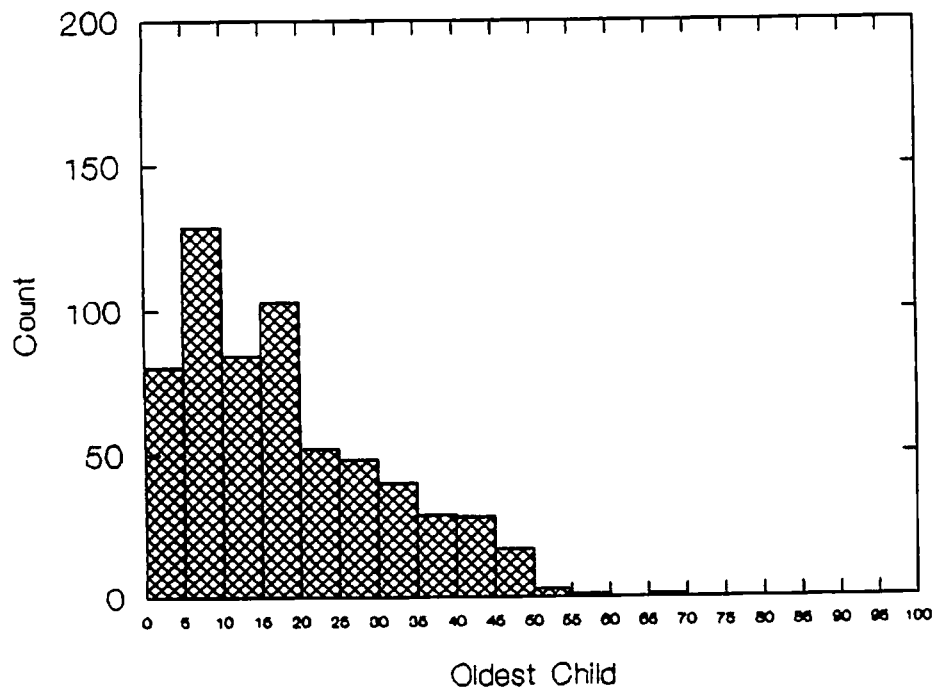
	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
MISS	1068	68.99	1480	69.42	1316	71.83	1321	68.23	2349	69.29



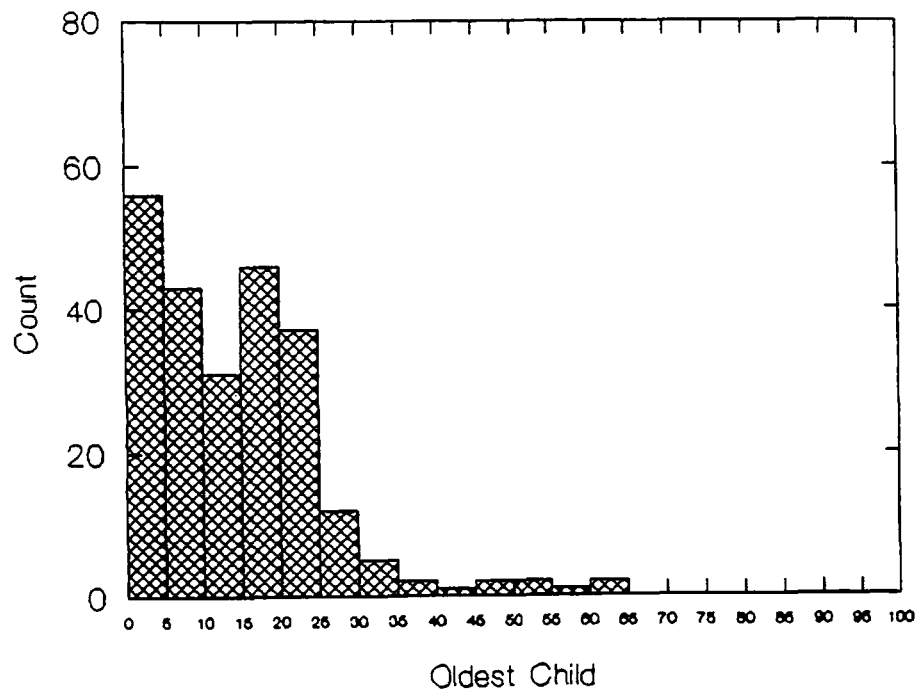
OKID1, CROW, 1910



OKID1, HOPI, 1910



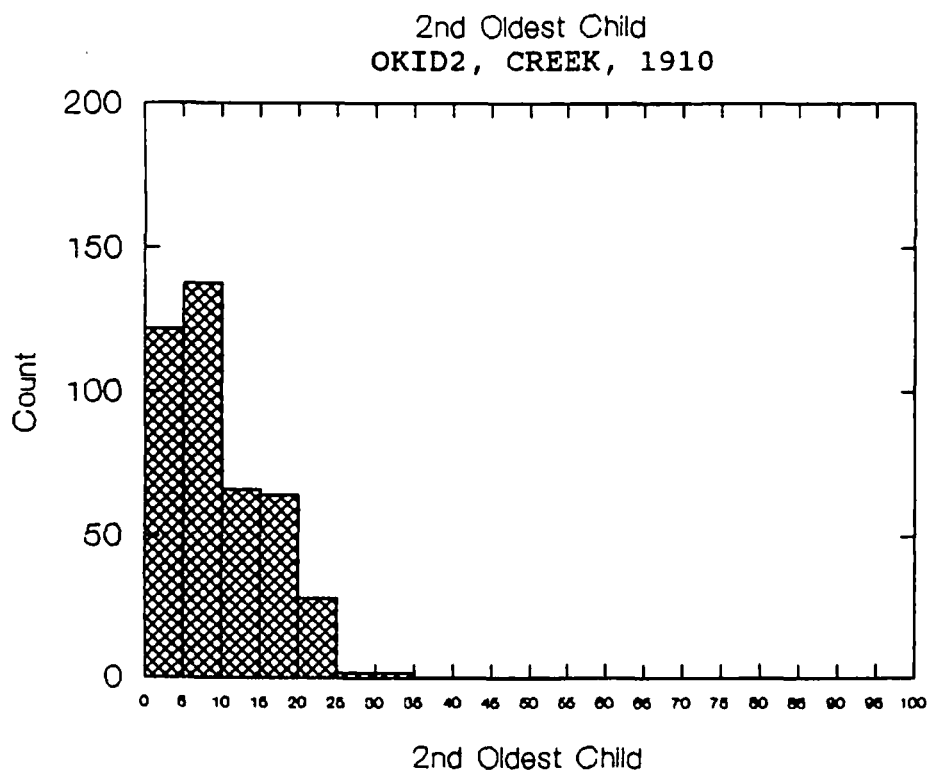
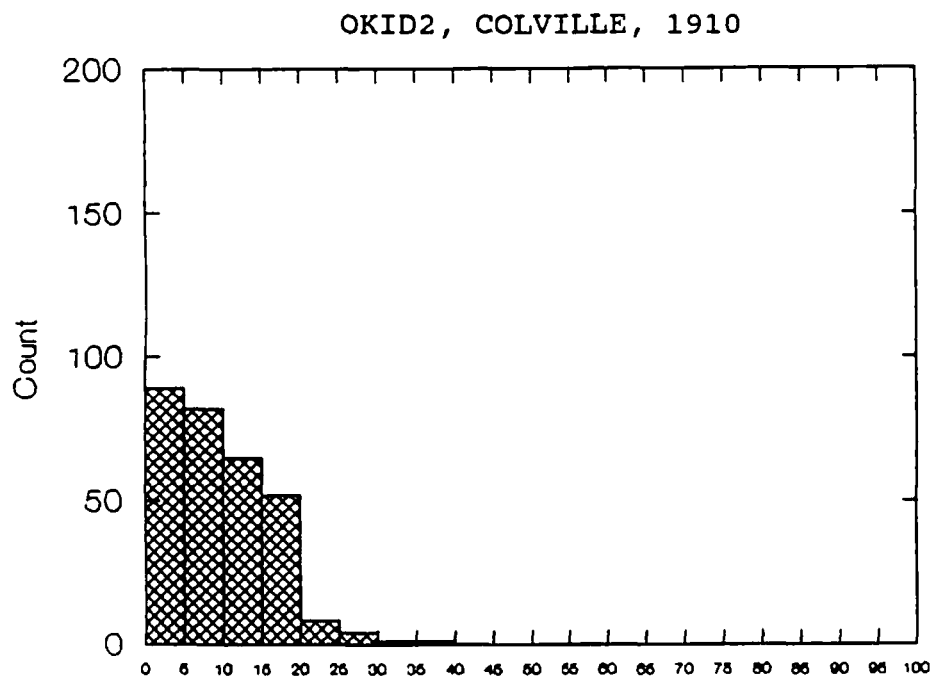
OKID1, WHITE EARTH, 1910



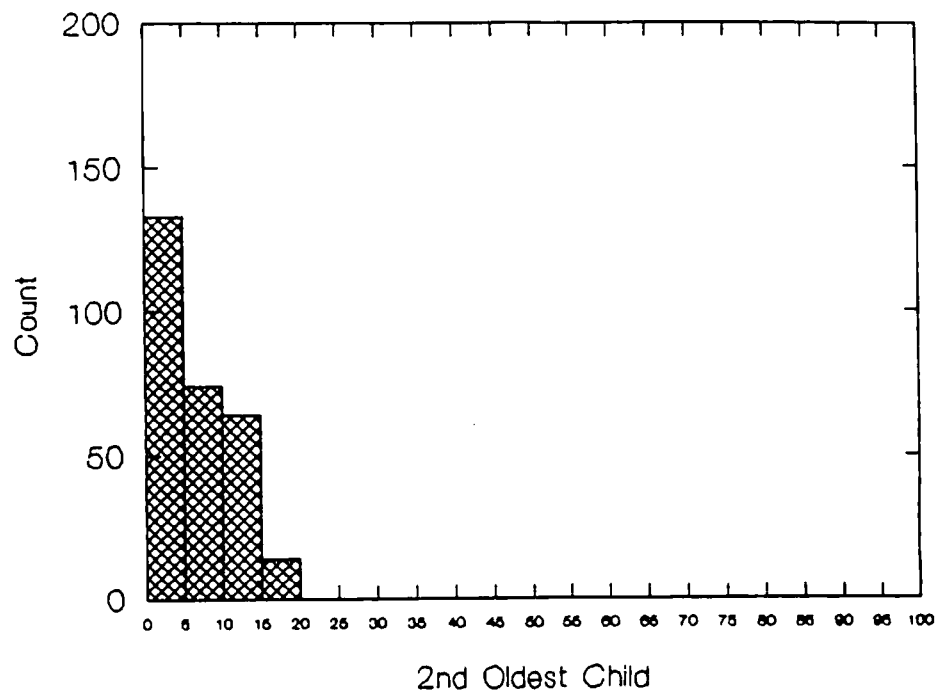
OKID2 - age of own second oldest child in household
Constructed.

Missing data and inapplicable: 99

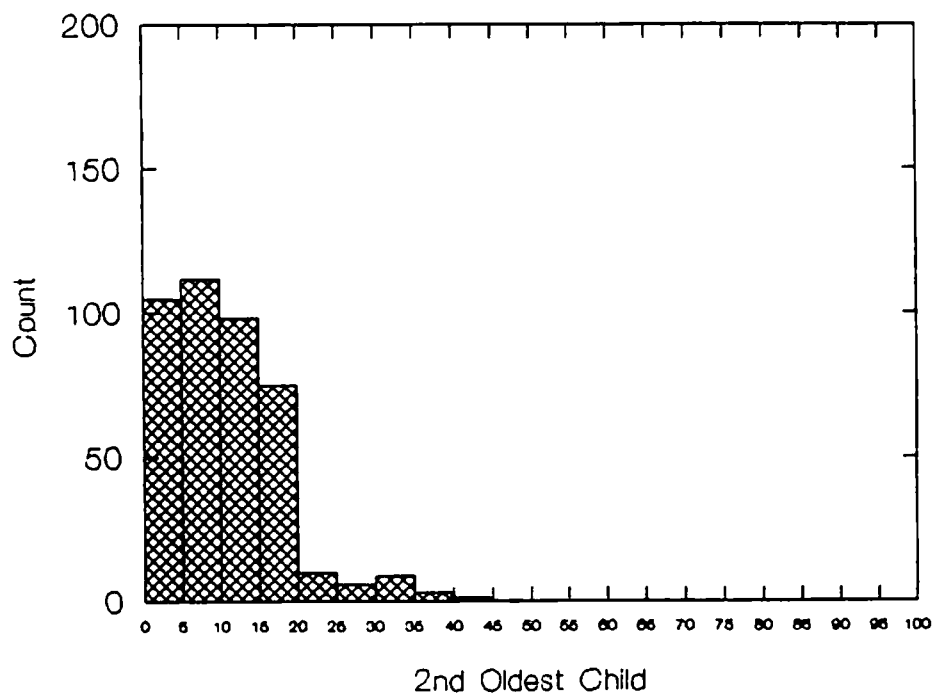
	COLVILLE			CREEK			CROW			HOPI			WHITE EARTH		
	VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT		
MISS	1246	80.49		1710	80.21	1547	84.44	1517	78.36	2645	78.02				



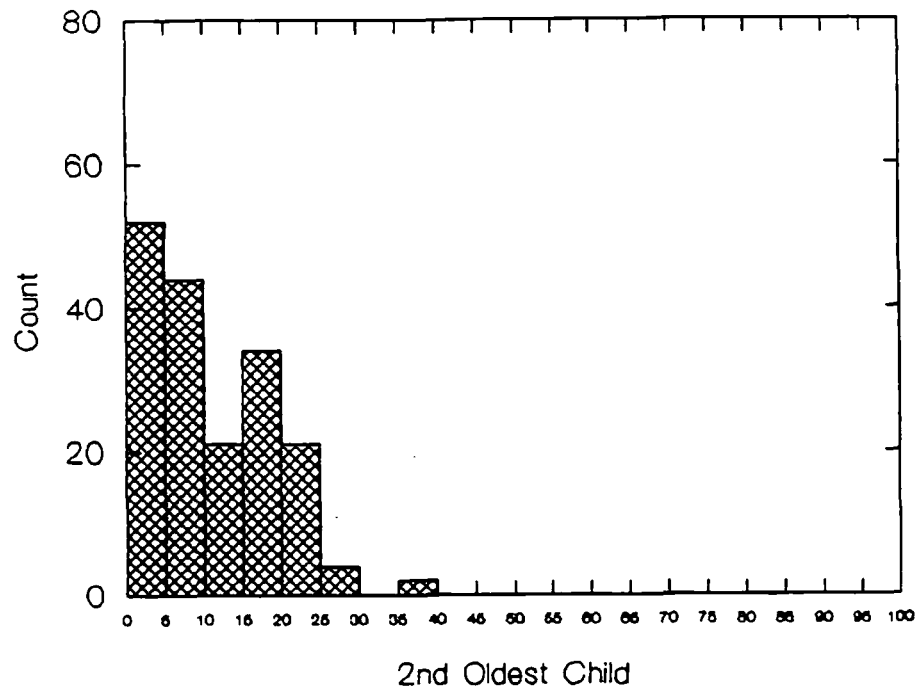
OKID2, CROW, 1910



OKID2, HOPI, 1910

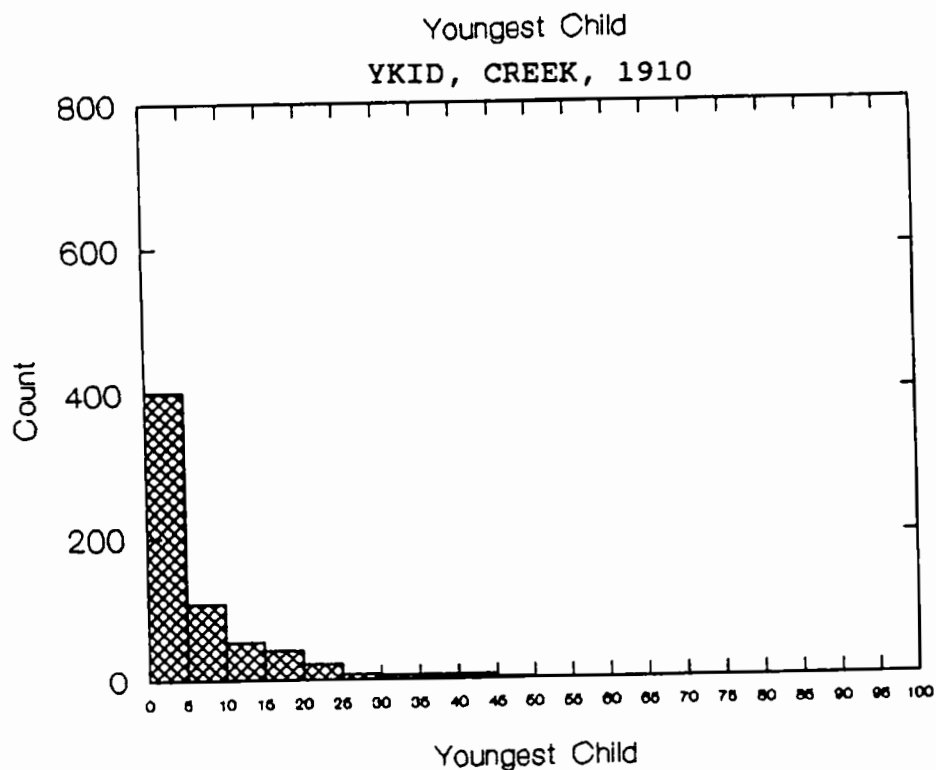
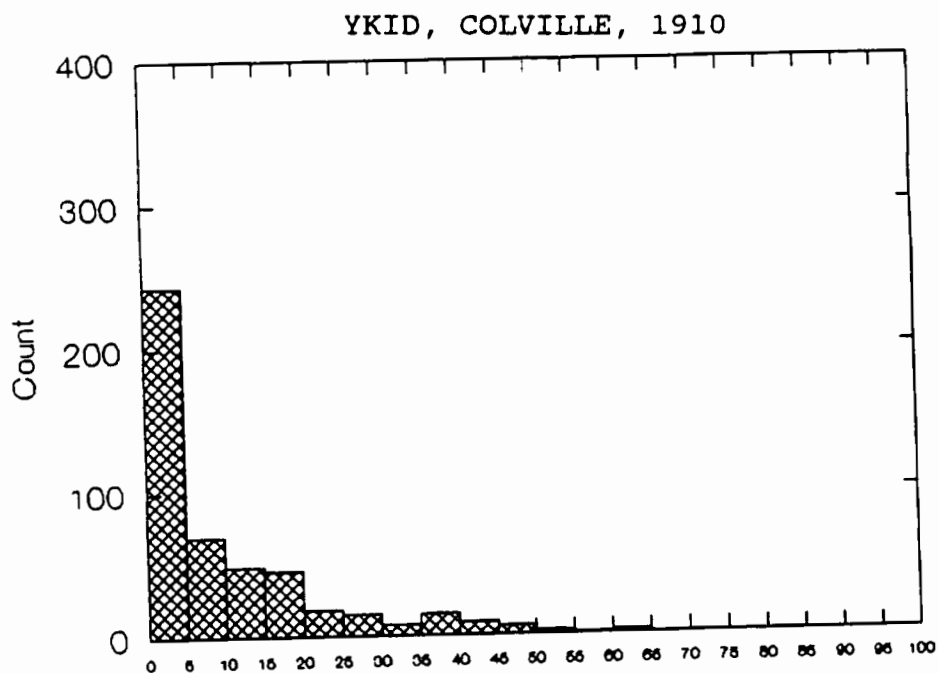


OKID2, WHITE EARTH, 1910

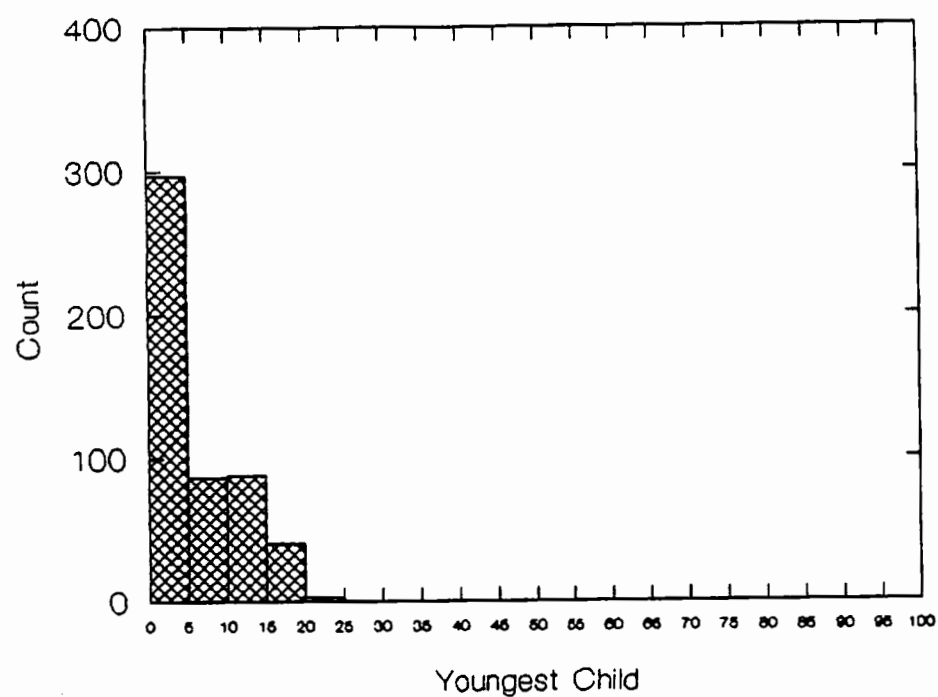


YKID - age of own youngest child
 Constructed.
 Missing data and inapplicable: 99

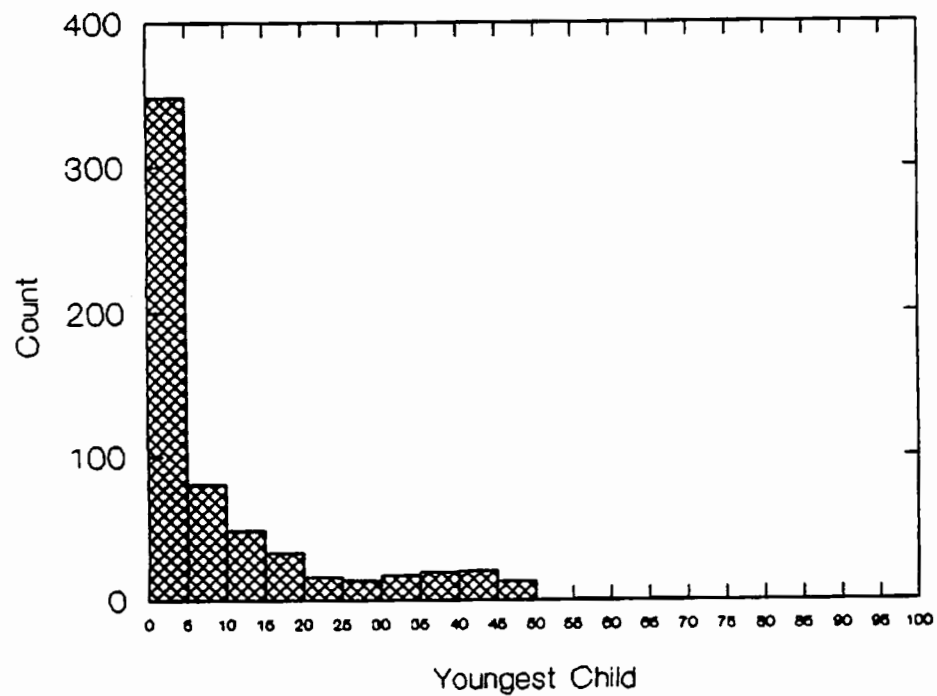
COLVILLE			CREEK		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
MISS	1068	68.99	1480	69.42	1316	71.83	1321	68.23	2349	69.29



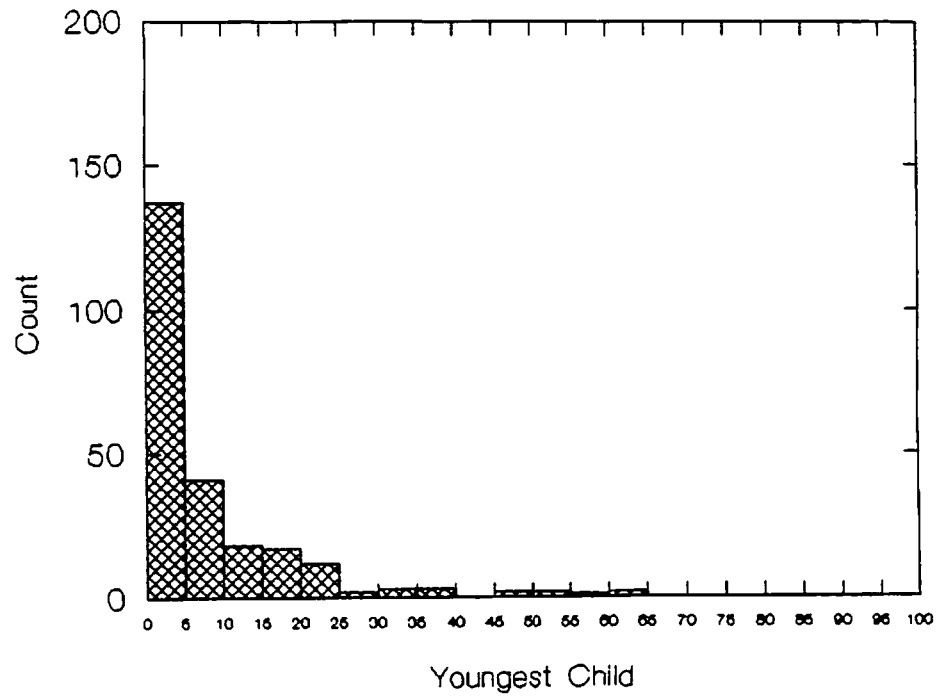
YKID, CROW, 1910



YKID, HOPI, 1910



YKID, WHITE EARTH, 1910



KIDS16 - number of children under 16 in household

Constructed.

Missing data: 99 (if anyone in household has age missing)

	COLVILLE		CREEK		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
0	401	25.90	250	11.73	609	33.24	147	7.59	503	14.84
1	268	17.31	383	17.96	347	18.94	218	11.26	446	13.16
2	260	16.80	379	17.78	344	18.78	293	15.13	514	15.16
3	251	16.21	396	18.57	275	15.01	429	22.16	444	13.10
4	164	10.59	263	12.34	115	6.28	351	18.13	477	14.07
5	85	5.49	194	9.10	21	1.15	169	8.73	357	10.53
6	71	4.59	141	6.61	59	3.22	141	7.28	273	8.05
7	11	.71	73	3.42	33	1.80	12	.62	206	6.08
8	19	1.23	10	.47	29	1.58	27	1.39	117	3.45
9			39	1.83			32	1.65	39	1.15
10							16	.83		0.00
11							21	1.08	14	.41
12							28	1.45		
13							22	1.14		
18							30	1.55		
99	18	1.16	4	.19						

1930

The 1930 BIA censuses have all the numeric variables in common, but each census is quite different from the others. Although agents had forms to use and attempted to follow the same written rules, there was much variety between censuses. Agents answered some questions on the form the same for all its respondees ("is this Indian a ward of the government?: yes"; tribe was often the same, etc.). We did not enter information if it was the same for everyone listed. Also, there was a lot of detail as to where people were currently residing, and this was not coded numerically.

Relationships among the Crow were very detailed (with specific relationships pointed out as "son of #42). Instead of losing this information by assigning it a generic numeric code for "son," we left it as a character variable. Several other variables were left as character variables and were put at the end of each individual's record.

COLVILLE AGENCY CENSUS

These data come from National Archives Microfilm Collection M595, reel 55. The enumerator was Harvey K. Meyer, Superintendent, and the date given for the enumeration was March 31, 1930. The census forms were typed and individuals were arranged alphabetically according to the surname of the first

person listed in the family.

Number of cases: 2958

CREEK (There was no BIA census for the Creeks for 1930)

CROW AGENCY CENSUS

These data come from National Archives Microfilm Collection M595, reel 83. C.H. Asbury, superintendent, compiled the census;. It is dated April 1, 1930. The census forms were typed and individuals were arranged alphabetically. (Children with different surnames from parents are not listed with the parents but are usually cited as, for example, "son of 42" in the RELATION column. However, wives often have different surnames from others in the family and usually follow the husband (who is listed as the head). The person listed as #1883 was crossed out on the original sheet (with Negro written in the IBLOOD column) but we included him anyhow.

Number of cases: 1967

HOPI AGENCY CENSUS

These data come from National Archives Microfilm Collection M595, reel 190. The censuses for some villages are dated April 1, 1930, while others are dated June 30, 1930. The census forms were typed and individuals were arranged alphabetically according to the surname of the first person listed in the family. The various Hopi villages were enumerated by the following

individuals; the accompanying dates were used on the forms:

Tewa	Edgar K. Miller, Superintendent (April 1)
Sitchumnovi	Miller (April 1)
Walpi	Miller (April 1)
Chepaulovi	J.H.Kirkland, Principal (April 1)
Meshongnovi	Kirkland (April 1)
Chimopovy	Freal McBride, Teacher (April 1)
Oraibi	Miller (June 30)
Bacabi	Miller (June 30)
Hotevilla	Miller (June 30)

Number of cases: 2469

WHITE EARTH AGENCY CENSUS

These data come from National Archives Microfilm Collection M595, reel 65. E.A. Allen, superintendent, compiled the census. It is dated April 1, 1930. The census forms were typed and individuals were arranged alphaabetically. The bands are arranged into three regions (north, south and central sections of the reservation).

Number of cases: 8582

Columns for use with 1930 data sets.

1	(1) SUBGROUP	89-108 (20) OTHER*
2-5	(4) HHNO*	109-125 (17) PO*
6-7	(2) FAMSIZE	126-137 (12) COUNTY*
8-11	(4) NUMBER*	138-139 (2) STATE*
12	(1) SEX	
13-14	(2) AGE	COLVILLE ONLY
15	(1) IBLOOD	109-114 (6) ALLOTNO*
16	(1) MARSTA	
17	(1) ATJURIS	CROW ONLY
18-19	(2) FKEY*	89-105 (17) PO*
20-21	(2) MKEY*	106-117 (12) COUNTY*
22-23	(2) SPKEY*	118-119 (2) STATE*
24-25	(2) SPAGE	120-125 (6) ALLOTNO*
26-27	(2) NUMKIDS	126-130 (5) MONTHS*
28	(1) NUMCH5	131-134 (4) ANNUITNO*
29-30	(2) OKID1	
31-32	(2) OKID2	HOPI ONLY
33-34	(2) YKID	140-148 (9) TRIBE*
35-36	(2) KIDS16	
37-54	(18) SURNAME*	WHITE EARTH ONLY
55-79	(25) GIVENAME*	140-145 (6) ALLOTNO*
80-88	(19) RELATION*	

CODES 1930

SUBGROUP

Missing Data: none

	VAL	FREQ	PCT
COLVILLE			
Colville	1	2958	100.0
CROW			
Crow	1	1967	100.0
HOPI			
Tewa	1	308	12.5
Sitchumnovi	2	313	12.7
Walpi	3	163	6.6
Chepaulovi	4	123	5.0
Meshongnovi	5	266	10.8
Chimopovy	6	307	12.4
Oraibi	7	442	17.9
Bacabi	8	129	5.2
Hotevilla	9	418	16.9

	VAL	FREQ	PCT
WHITE EARTH			
Northern White Earth, Twin Lake Subagency			
Mille Lacs			
Mississippi	1	1608	18.7
Gull Lake	2	588	6.9
Fond du Lac	3	131	1.5
Pembina	4	748	8.7
Cass & Winnibigoshish	5	81	.9
Central White Earth			
Mississippi	6	3725	43.4
White Oak Point	7	387	4.5
Southern White Earth, Pine Point Subagency			
Otter Tail Pillager	8	985	11.5
Removal Leech Lake	9	329	3.8

HHNO - number of family in sequence. Constructed.

Missing data: none

FAMSIZE - number of individuals in family. Constructed.

Missing data: none

	COLVILLE			CROW			HOPI			WHITE EARTH		
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT		
1	694	23.46	287	14.59	70	2.84	2240	26.10				
2	456	15.42	384	19.52	190	7.70	1128	13.14				
3	402	13.59	339	17.23	267	10.81	1164	13.56				
4	312	10.55	260	13.22	352	14.26	1136	13.24				
5	445	15.04	220	11.18	415	16.81	915	10.66				
6	234	7.91	162	8.24	408	16.52	588	6.85				
7	161	5.44	126	6.41	336	13.61	616	7.18				
8	144	4.87	112	5.69	240	9.72	304	3.54				
9	54	1.83	27	1.37	108	4.37	261	3.04				
10	40	1.35	50	2.54	70	2.84	160	1.86				
11							44	.51				
13					13	.53	26	.30				
16	16	.54										

NUMBER - number assigned to each individual in the list

Missing data: none

NOTE: there are three lists of people, one for each region

SEX

Missing data: none

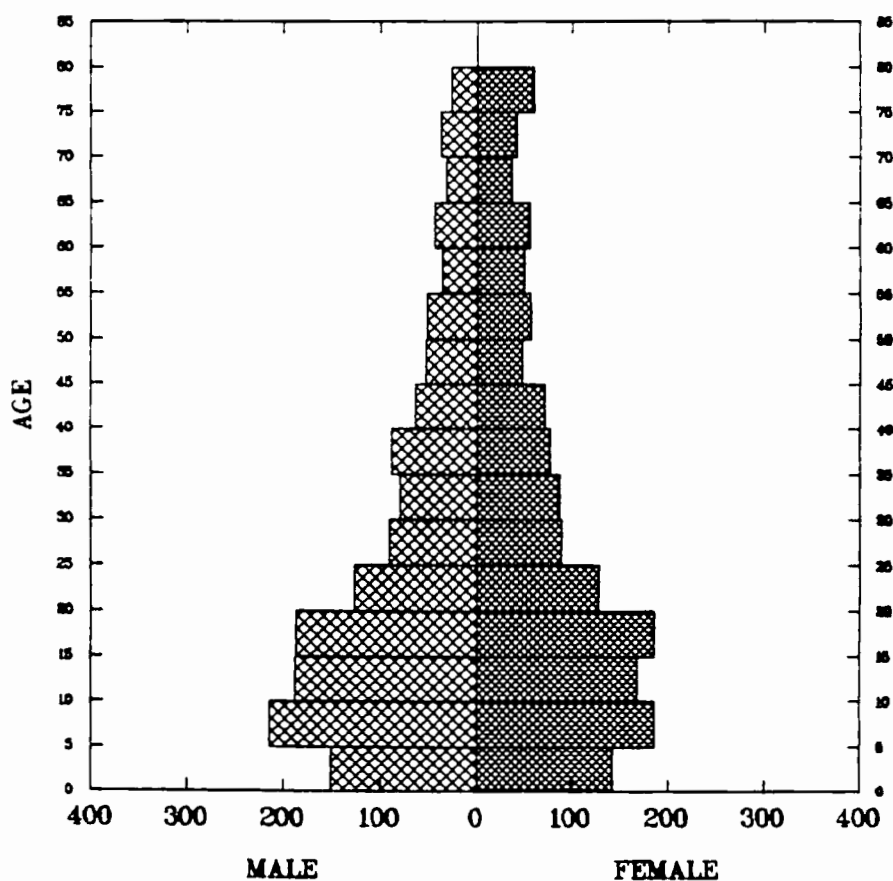
VAL	COLVILLE		CROW		HOPI		WHITE EARTH	
	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
1	1480	50.03	988	50.23	1294	52.41	4273	49.79
2	1478	49.97	979	49.77	1175	47.59	4309	50.21

AGE

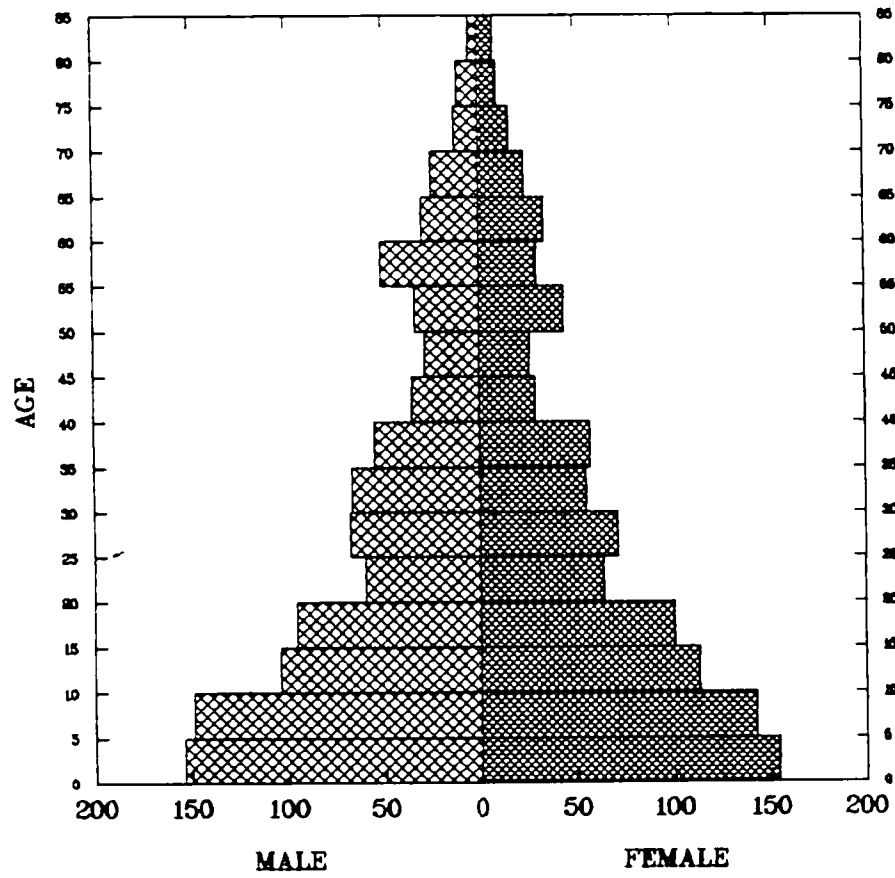
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MISSING	0	0	24	2
MISS %	0.0	0.0	.97	.02

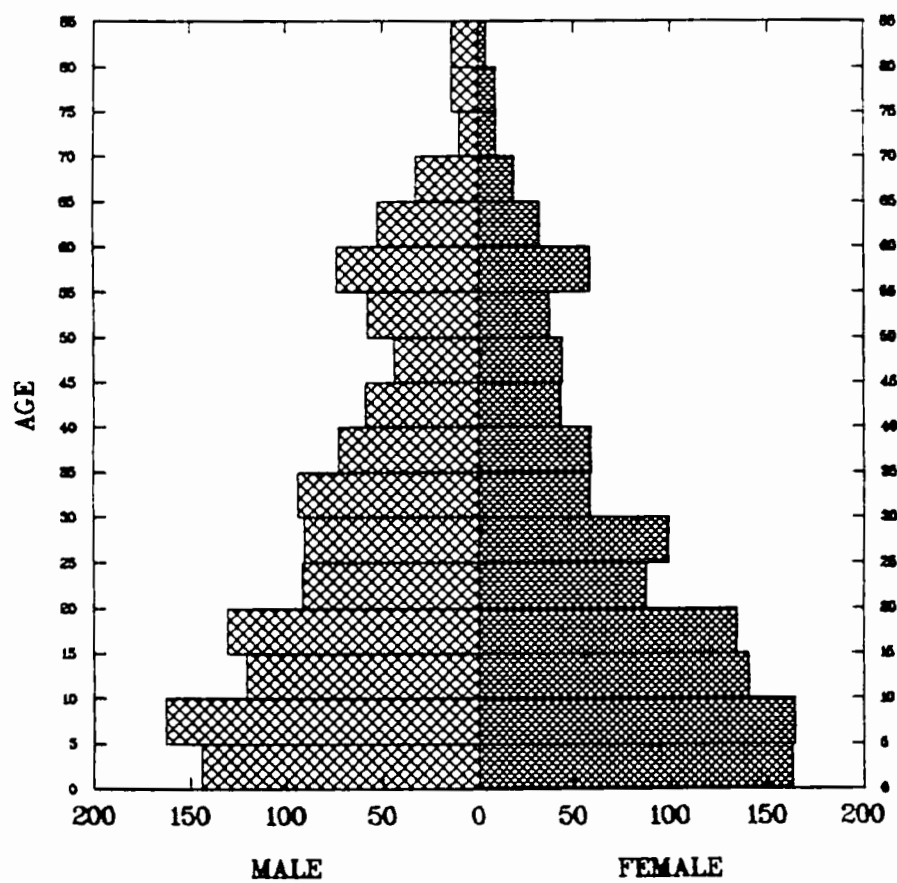
AGE STRUCTURE, COLVILLE, 1930



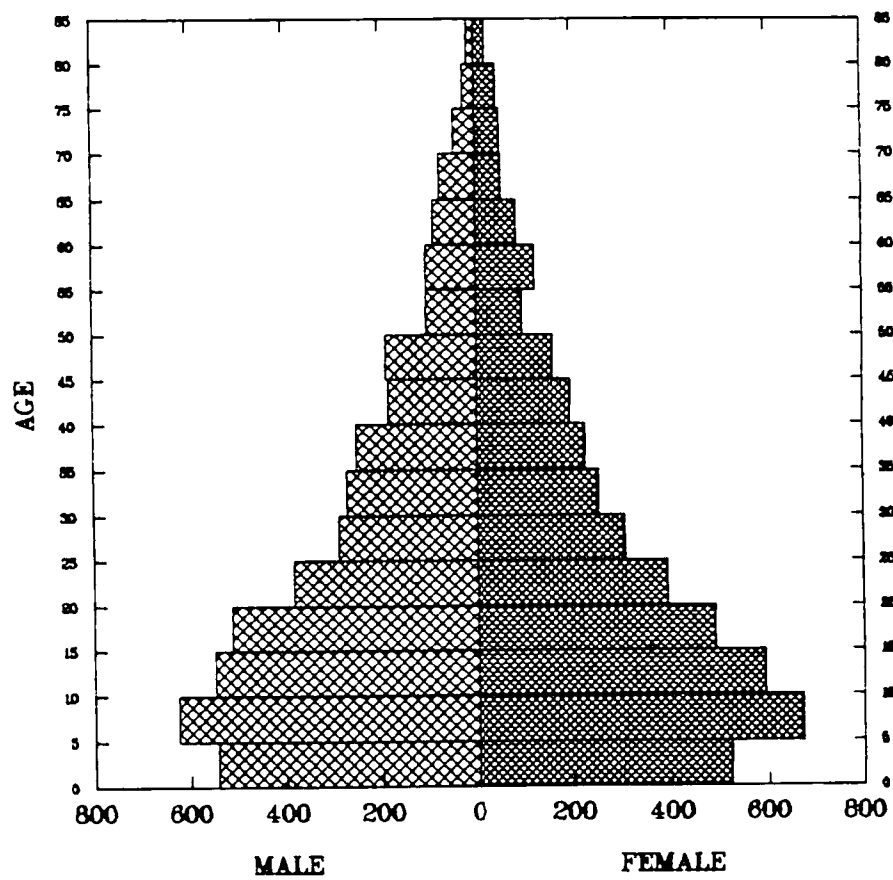
AGE STRUCTURE, CROW, 1930



AGE STRUCTURE, HOPI, 1930



AGE STRUCTURE, WHITE EARTH, 1930



IBLOOD - Degree of Indian blood
Missing data: 9

	COLVILLE		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
0	1	.03	2	.10				
1	377	12.75	154	7.83				
2	1277	43.17	815	41.43	8	.32		
3							8501	99.06
4	1303	44.05	996	50.64	2461	99.68	68	.79
9							13	.15

MARSTA - marital status
Missing data: 9

	COLVILLE		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
1	551	18.63	616	31.32	873	35.36	591	6.89
2	382	12.91	130	6.61	40	1.62	1995	23.25
3	189	6.39	106	5.39	135	5.47	295	3.44
4	2	.07					2	.02
5	1828	61.80	1115	56.69	1416	57.35	5645	65.78
6	6	.20						
9					5	.20	54	.63

ATJURIS - is individual residing at jurisdiction where enrolled?
Missing data: 9

	COLVILLE		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
1	2957	99.97	1721	87.49	2080	84.24	4625	53.89
2	1	.03	246	12.51	122	4.94	3957	46.11
3					267	10.81		

CONSTRUCTED VARIABLES

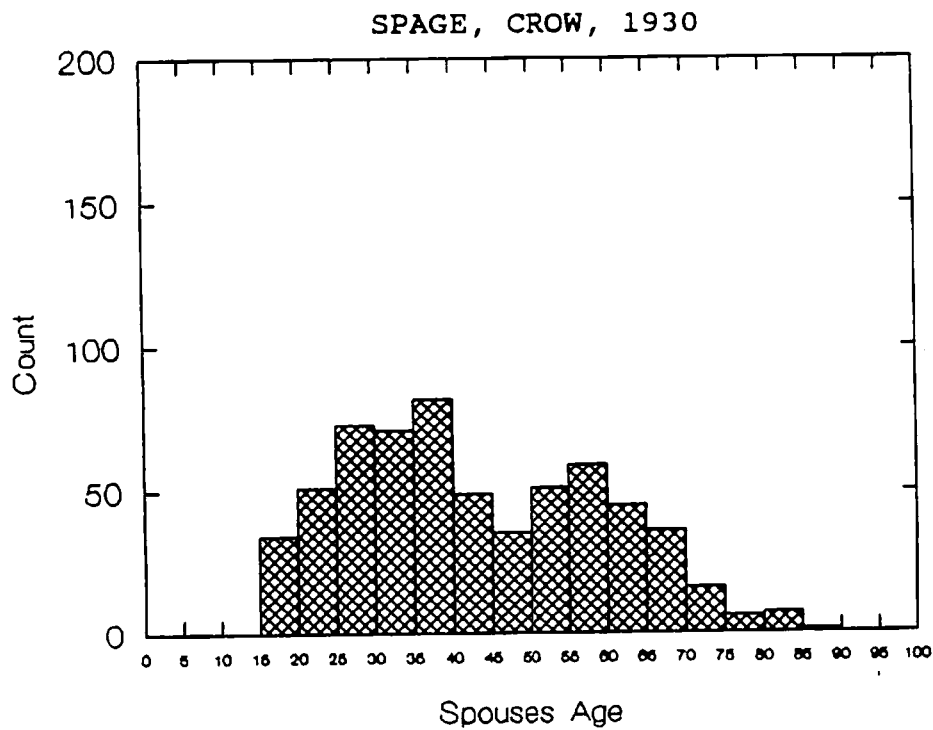
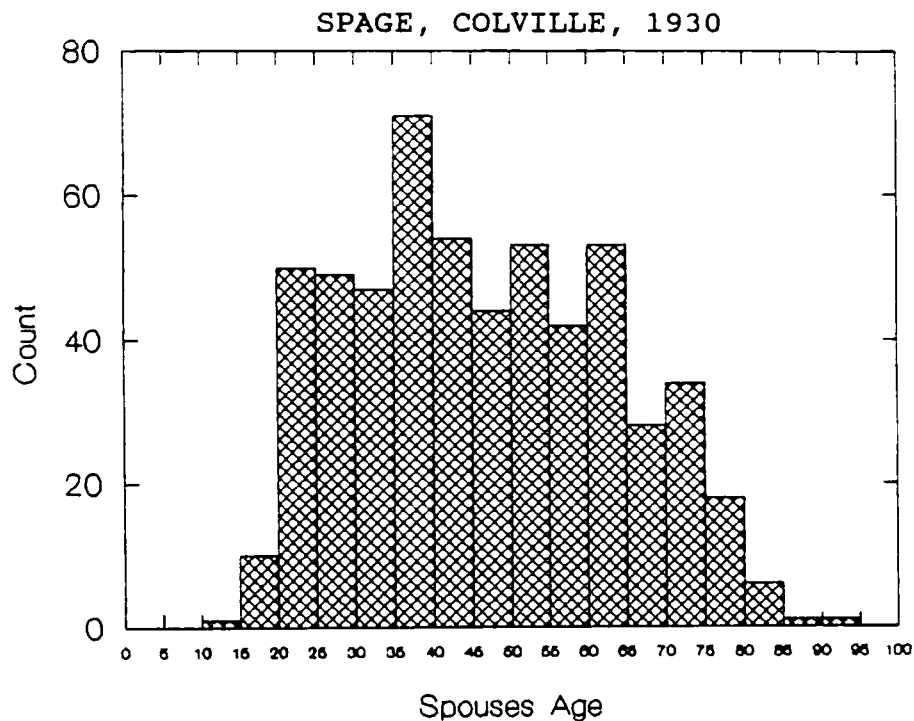
FKEY - position of father within family
Missing data: 99

MKEY - position of individual's mother within family
Missing data: 99

SPKEY - position of individual's spouse within family
Missing data: 99

SPAGE - age of spouse
Missing data: 99

	COL- VILLE	CROW	HOPI	WHITE EARTH
MISSING	2396	1351	1603	7988
MISS %	81.00	68.68	64.93	93.08



SPAGE, HOPI, 1930



SPAGE, WHITE EARTH, 1930



NUMKIDS - number of own children within family
Missing data: none

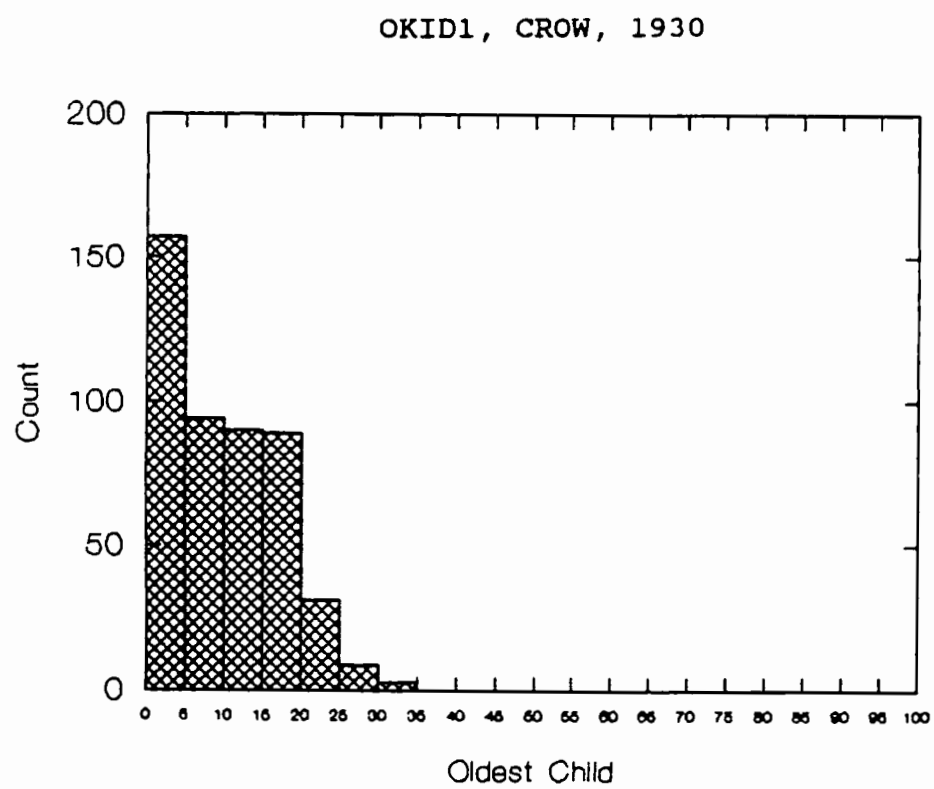
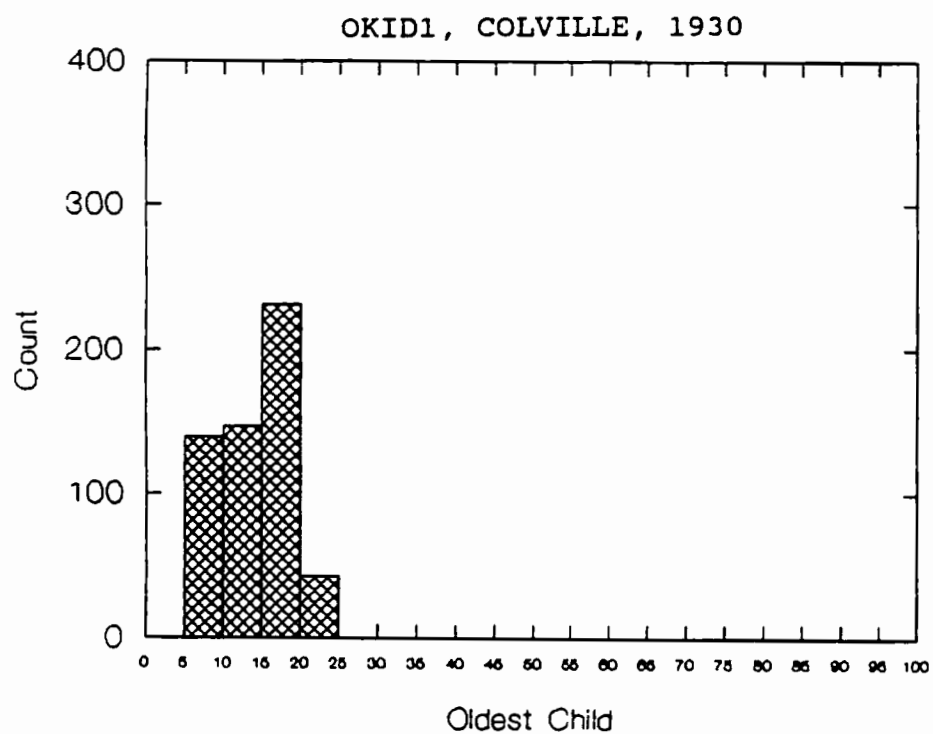
	COLVILLE		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
0	2310	78.09	1494	75.95	1670	67.64	6877	80.13
1	196	6.63	153	7.78	186	7.53	543	6.33
2	148	5.00	123	6.25	192	7.78	365	4.25
3	127	4.29	66	3.36	151	6.12	308	3.59
4	74	2.50	50	2.54	129	5.22	189	2.20
5	49	1.66	42	2.14	74	3.00	120	1.40
6	37	1.25	23	1.17	39	1.58	91	1.06
7	10	.34	5	.25	18	.73	42	.49
8	3	.10	10	.51	8	.32	26	.30
9	3	.10	1	.05			18	.21
10					2	.08	2	.02
12							1	.01
15	1	.03						

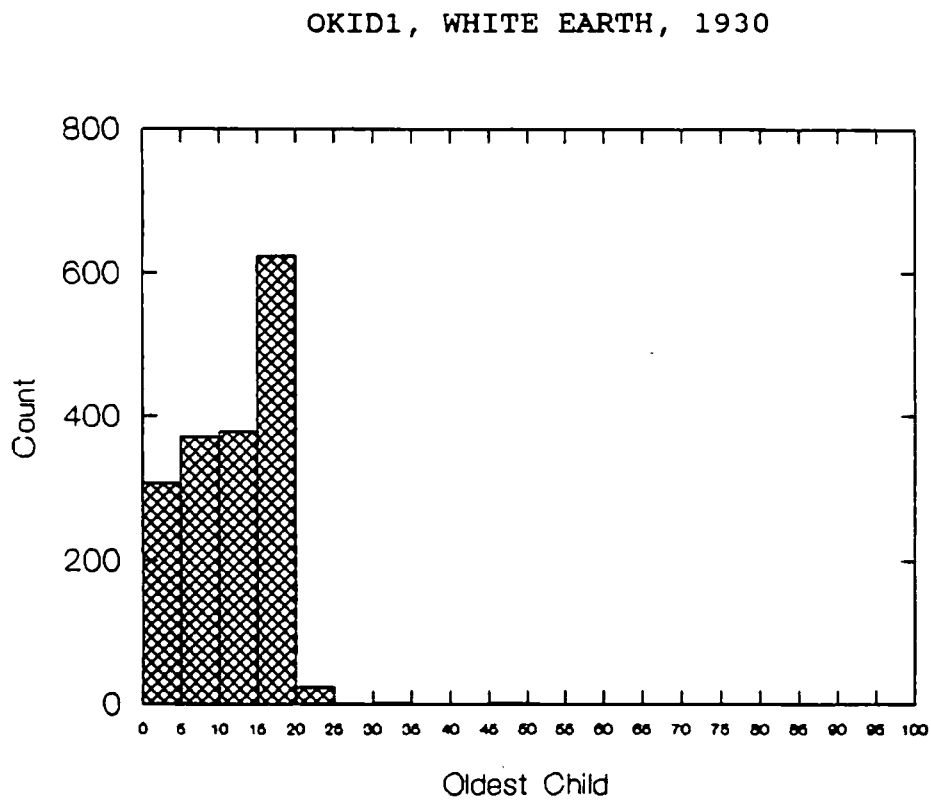
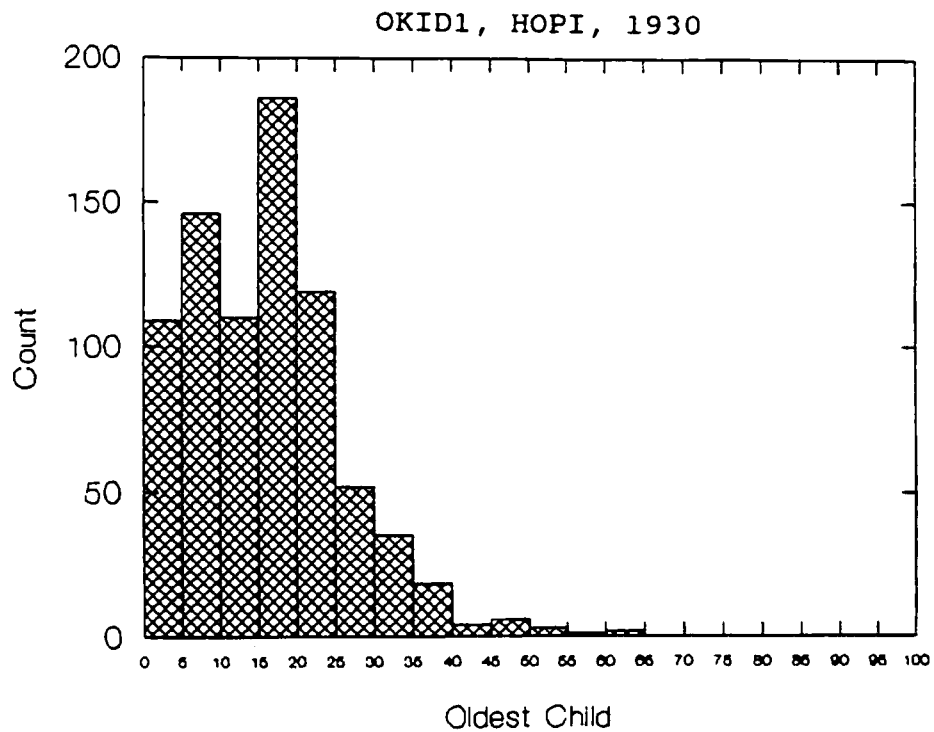
NUMCH5 - number of own children under five within family
Missing data: 9

	COLVILLE		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
0	2656	89.79	1660	84.39	2071	83.88	7733	90.11
1	211	7.13	160	8.13	229	9.28	541	6.30
2	76	2.57	117	5.95	141	5.71	262	3.05
3	14	.47	28	1.42	20	.81	43	.50
4	1	.03					2	.02
5			2	.10				
9					8	.32	1	.01

OKID1 - age of own oldest child
Missing data: 99

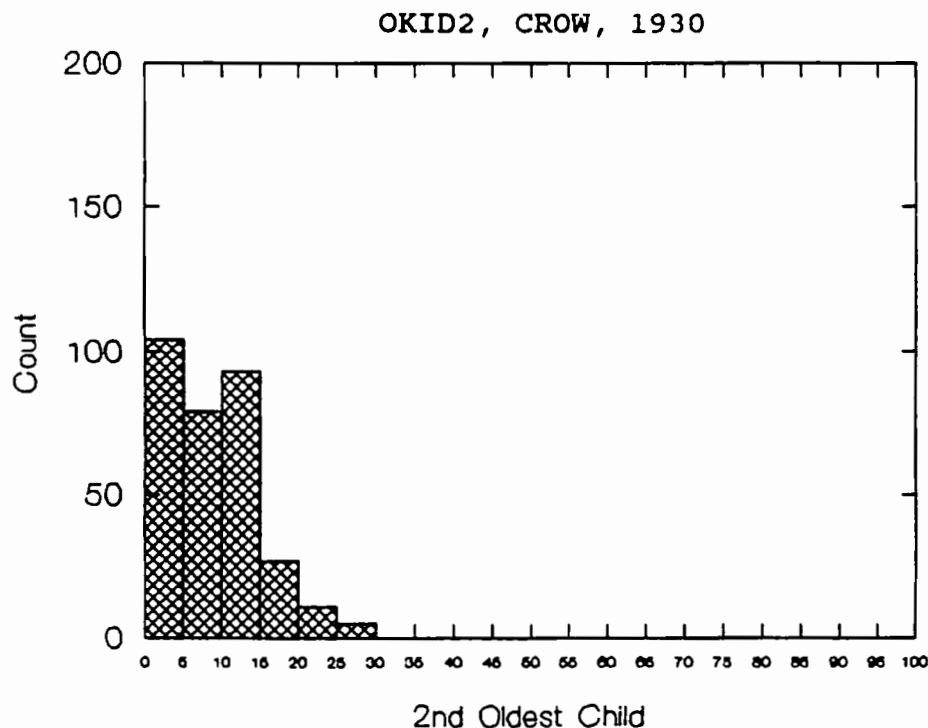
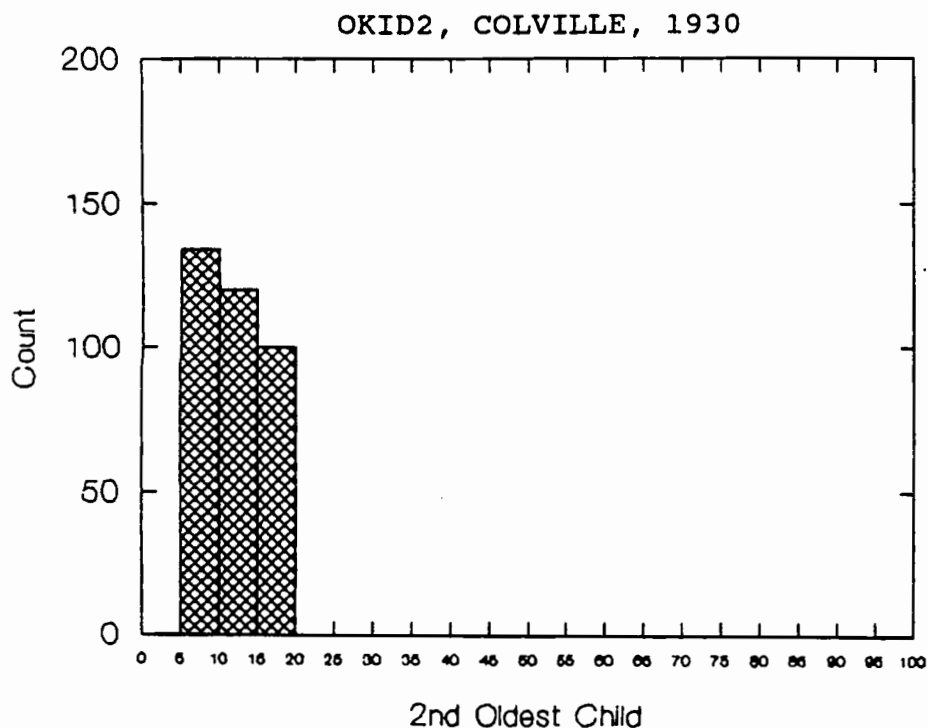
	COLVILLE		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
MISS	2310	78.09	1494	75.95	1678	67.96	6878	80.14



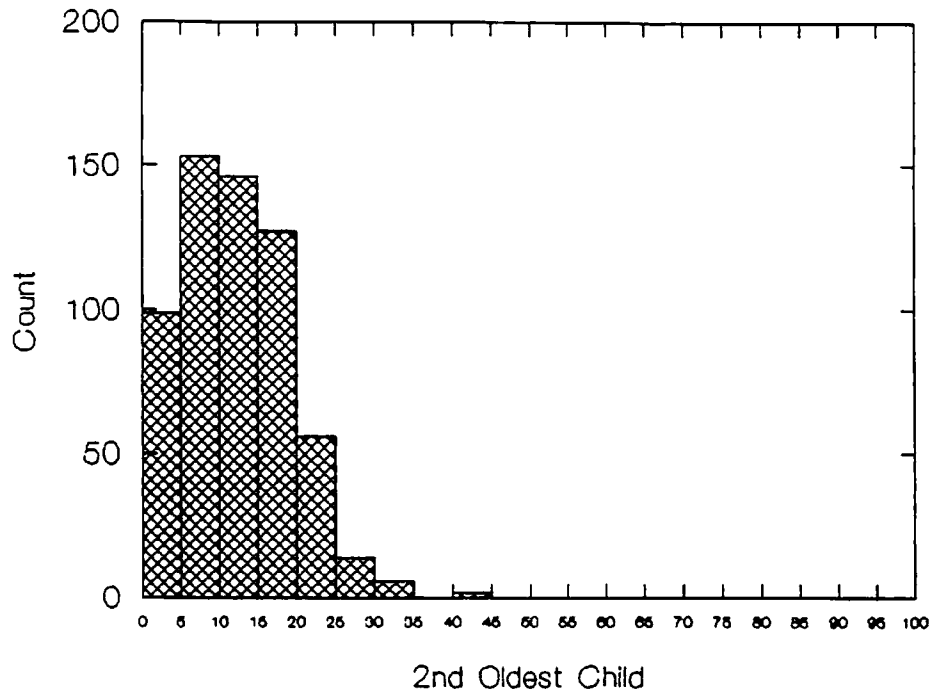


OKID2 - age of own second oldest child.
Missing data: 99

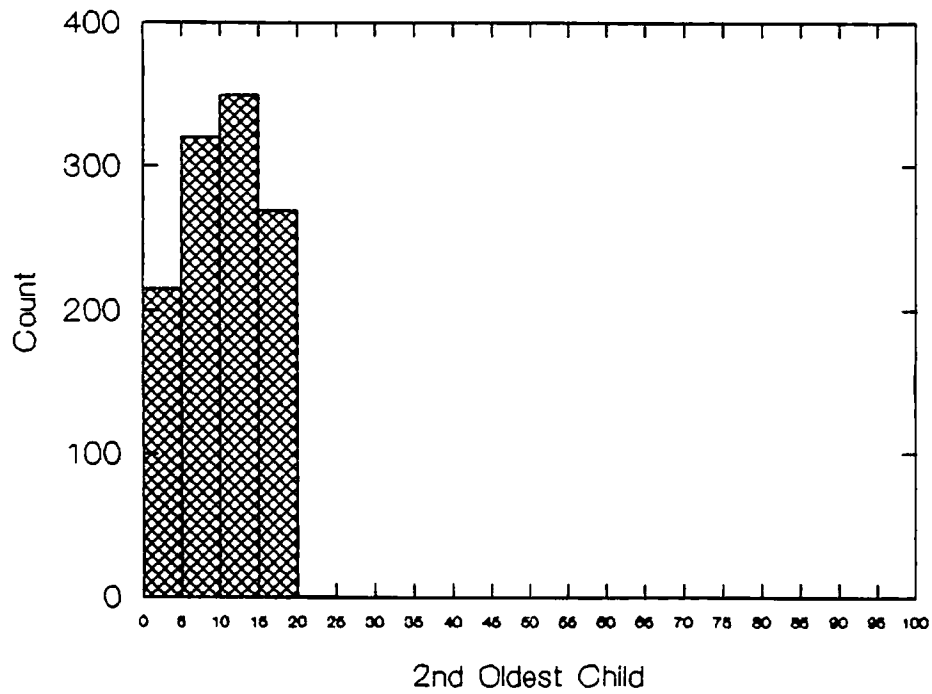
	COLVILLE		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
MISS	2521	85.23	1648	83.78	1866	75.58	7427	86.54



OKID2, HOPI, 1930

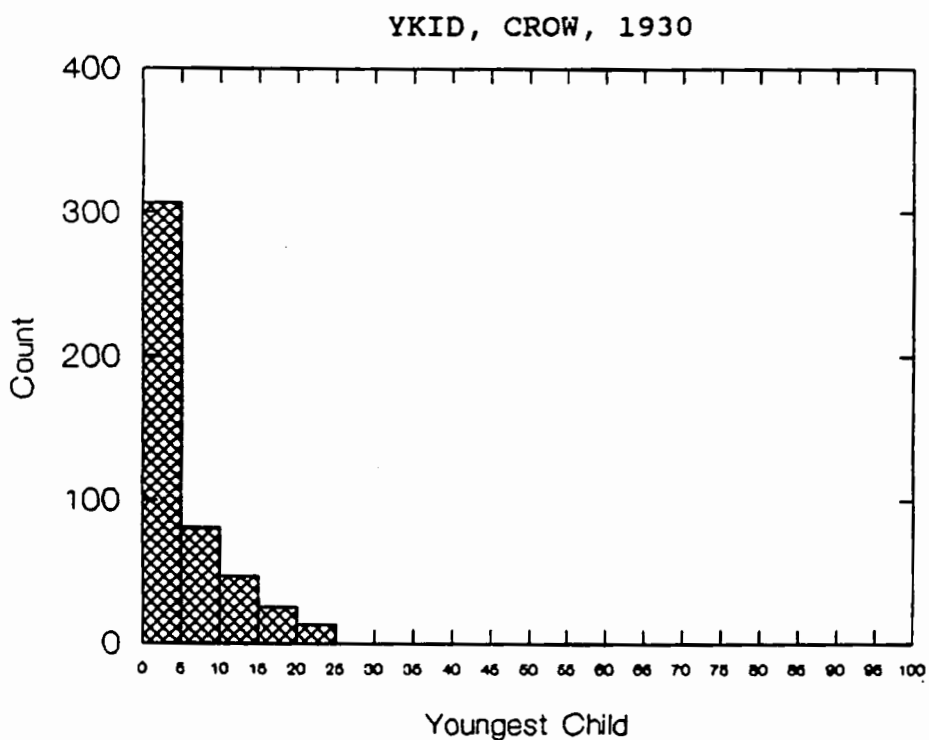
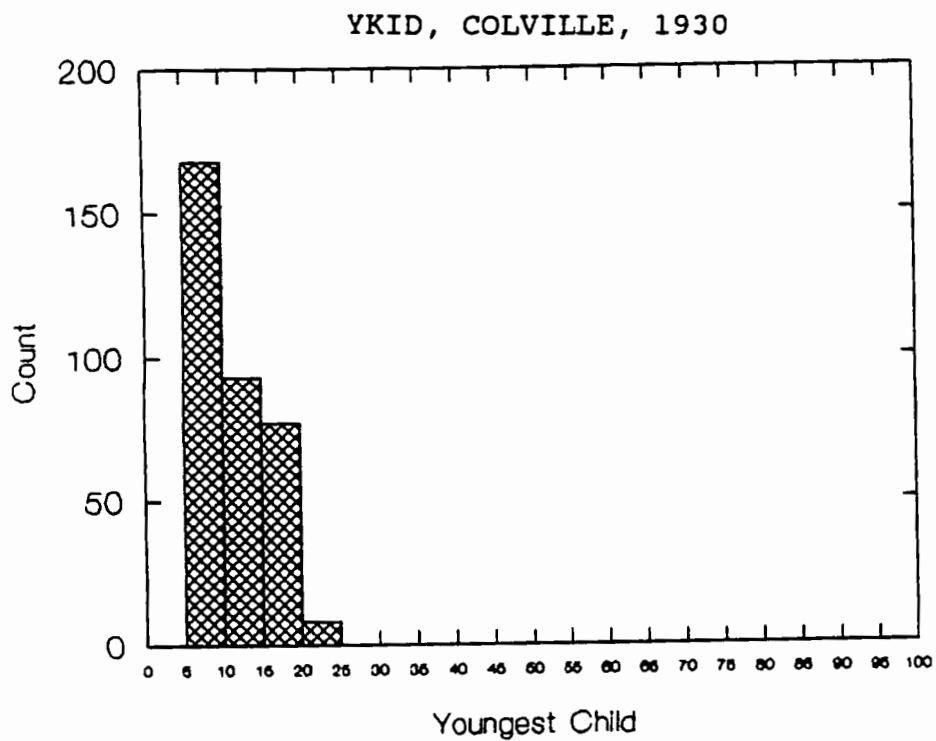


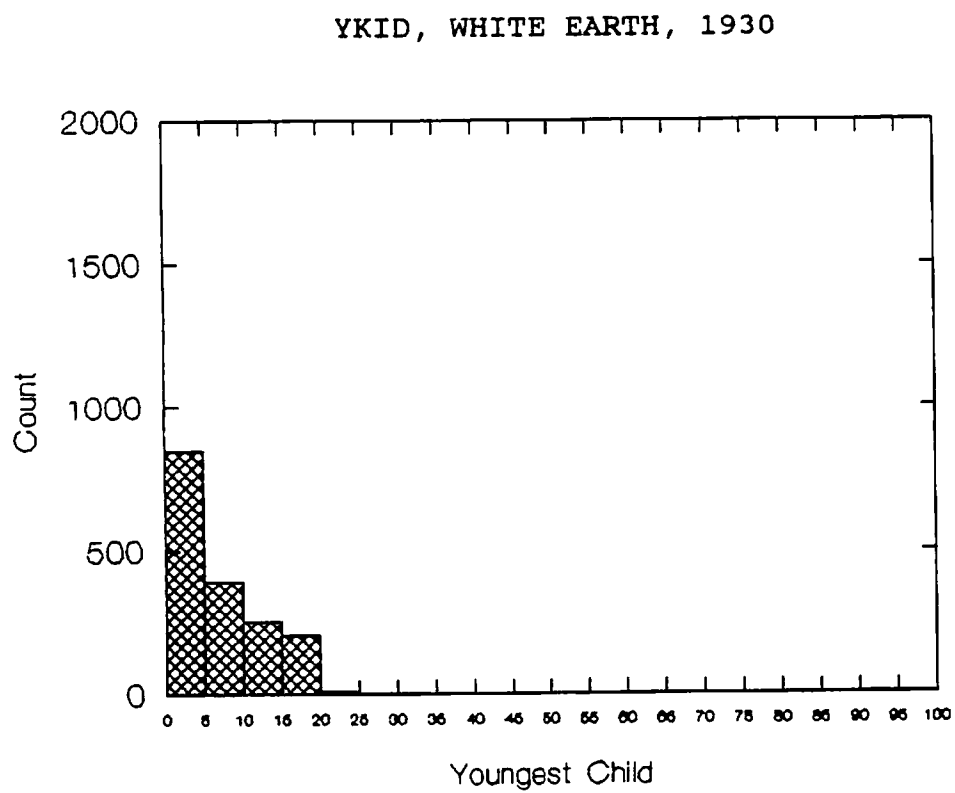
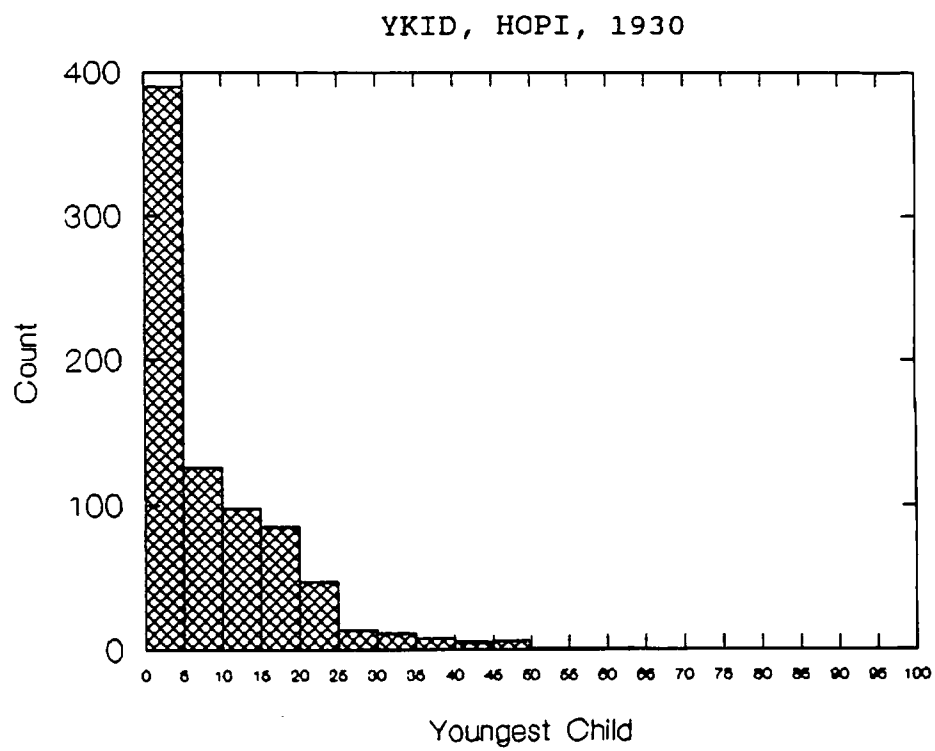
OKID2, WHITE EARTH, 1930



YKID - age of own youngest child.
 Missing data: 99

	COLVILLE		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
MISS	2310	78.09	1494	75.95	1678	67.96	6878	80.14





KIDS16 - number of individuals age 16 and under within family
Missing data: 99

	COLVILLE		CROW		HOPI		WHITE EARTH	
VAL	FREQ	PCT	FREQ	PCT	FREQ	PCT	FREQ	PCT
0	1003	33.91	537	27.30	462	18.71	2596	30.25
1	415	14.03	349	17.74	337	13.65	1280	14.91
2	399	13.49	338	17.18	485	19.64	1118	13.03
3	431	14.57	269	13.68	373	15.11	1127	13.13
4	299	10.11	210	10.68	406	16.44	954	11.12
5	188	6.36	100	5.08	207	8.38	572	6.67
6	143	4.83	87	4.42	126	5.10	464	5.41
7	35	1.18	18	.92	18	.73	234	2.73
8	29	.98	49	2.49	23	.93	132	1.54
9			10	.51			71	.83
10							13	.15
12	16	.54					13	.15
99					32	1.30	8	.09

CHARACTER VARIABLES

SURNAME - Individual's surname

Missing data: N

NOTE: If individual had only one name (usually it was then an Indian name), the name was typed under GIVENAME

GIVENAME - Individual's givenname

Missing data: N

RELATION - relationship to family head

Missing data: MISSING

OTHER - miscellaneous other information

Missing data: N

NOTE: Includes age in months for 0 year olds, other names, other allotment or annuity numbers.

ANNUITNO - annuity number (Crow)

Missing data: N

ALLOTNO - allotment number

Missing data: N

PO - Post office if not on reservation

COUNTY - County wher residing if off reservation

STATE - State where living if off reservation

MONTHS - Months old for those less than 1 year.

V. CONCLUSIONS AND DESCRIPTION OF SUBSEQUENT REPORTS

The American Indian Family History Project has compiled an enormous amount of data from four census years for five Native American communities. Stretched over a fifty-year time span, these data offer a number of opportunities for examining the social life of Indian people during a time of dramatic social change. First, of course, these censuses allow us to trace the outlines of the demographic history of the five communities.

One striking feature of the data sets reflects differences in demographic trends. All of the tribes in this study were growing in size by 1930. All of the tribes had also experienced population losses during the nineteenth century. Thus the five tribes studied were passing through some part of what demographers call a "population transistion" between 1885 and 1930. Nevertheless, the great cultural, historical, and geographical differences between the five groups created a great variety of demographic patterns within this common history.

The populations of the five groups rose at different rates and in different ways. Among the Crow and the Hopi, population fell through 1910, after which it rebounded. The Hopi population actually experienced net growth between 1885 and 1930 as a result of this rebound, but the Crow remained significantly below their 1885 population level. The other populations experienced marked growth throughout the study period. At White Earth, which had

the greatest rate of growth, the population essentially tripled.¹

Different rates of increase and different starting points for the tribes' population transitions created different age patterns in the communities under study. White Earth, with the highest rate of growth, had the youngest population. At Colville and Crow, the population was older, but the mean age of tribal members was declining. All reservations except White Earth exhibit a rise in the proportion of children under the age of five. This reflects patterns of population growth and, possibly the fact that White Earth entered this transitional period earlier than the other tribes.

While the minimum age for spouses does not change much for any of the tribes studied, the mean age generally increases. This would indicate that a smaller percentage of people are marrying early or that more are marrying later. Overall, for the study period, the Creek and Hopi seem to have somewhat younger spouses than the other tribes, though the minimum ages do not differ significantly among any of the tribes. This is certainly reflected in the marriage data discussed in part 2 of this report.

Among all of the tribes there is a marked increase through time in the number of students (as a portion of all children and

¹. At both White Earth and Colville there is considerable immigration between 1885 and 1900, but much of the growth is still due to increased fertility. At White Earth, the original bands actually grow at a greater rate (316%) than the reservation as a whole (293%).

in absolute numbers), in literacy, and in ability to speak English. Except at White Earth, there is also increased diversity in occupational choices over time. At White Earth the range of these opportunities seems to decline. The greatest diversity of choices is found among the Creeks and at White Earth, despite decreasing choices at the latter. This heterogeneity is reflected elsewhere as well, and contributes to increasing demographic variability on all reservations studied.

All of the tribes studied included a wide variety of relatives in their households, though the vast majority were heads, spouses, and children¹. Except among the Creek and the Hopi, other sorts of relatives are represented only by very few persons. The Crows, for instance, exhibit one of the widest ranges of relatives, but the proportion who are not "nuclear" is quite small. The Creeks and Hopis exhibit both a wide range of relatives and high proportions who are not members of the nuclear family (see part 3, Households). For most groups the range and proportion of non-nuclear relatives increases through time.

In addition, the census data gathered for this project allow us to explore some focused topics. Marriage, for example, which we define as the settled union of individuals, was a common feature of Indian communities during this period. Defined differently by different cultural groups, marriage was nonetheless recognizable to all. Second, we can examine the

¹. This latter includes stepchildren and adopted children as well.

structure of households within Native American communities and trace their change through time. In the process of doing this we can also examine the impact of economic and social variables on the size and composition of households. Finally, the censuses offer us a glimpse at fertility and childrearing. Using the data gathered for this project we can describe when people begin having children, how frequently children are born in a family, and for how long a couple will have offspring. All of this information should also help us draw some conclusions about shifts in tribal population and community institutions.

Subsequent parts of this Occasional Paper will address each of these topics. Part Two will be on marriage, Part Three on households and Part Four on Fertility. Each part will contain summaries and discussions of the data gathered for the American Indian Family History Project as well as bibliographies and questions for further research.

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VII. APPENDIX: DATA SETS

DATA DISKS

Along with the results of our study, we have included all of the data sets used in this project on 3.5 inch double density diskettes. To increase their accessibility, the data sets are presented as DOS text files which can be used with a variety of programs on any IBM compatible computer. These files can be used with most statistical packages or database programs employing normal procedures for input from text files.

We have included a general disk directory which lists the files on each disk and names the censuses covered. For your convenience, this list also gives the size of each disk and of each file in kilobytes.

A second directory lists the variable fields for each data set, organized by disk and file. Included are the size of the disk and of each file on it, the columns employed for each variable field, the size of each field (in columns), and the name of the field. For a more detailed description of the variables see the Variable Descriptions in the Introduction (Part I).

DISK DIRECTORY

<u>DISK</u>	<u>SIZE</u>	<u>FILE</u>	<u>SIZE</u>	<u>CENSUS</u>
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		V00.TXT	211,771 KB	Colville 1900
		V10.TXT	243,037 KB	Colville 1910
2	707,434 KB	K10.TXT	334,724 KB	Creek 1910
		V30.TXT	372,709 KB	Colville 1930
3	680,141 KB	K00A.TXT	680,141 KB	Creek 1900
4	680,141 KB	K00B.TXT	680,141 KB	Creek 1900
5	546,343 KB	C85.TXT	546,343 KB	Crow 1886
6	578,406 KB	C00.TXT	290,781 KB	Crow 1900
		C10.TXT	287,625 KB	Crow 1910
7	725,429 KB	C30.TXT	287,183 KB	Crow 1930
		H85.TXT	133,825 KB	Hopi 1885
		H00.TXT	304,421 KB	Hopi 1900
8	698,994 KB	H10.TXT	303,953 KB	Hopi 1910
		H30.TXT	395,041 KB	Hopi 1930
9	730,112 KB	W85.TXT	192,697 KB	White Earth 1885
		W00.TXT	535,825 KB	White Earth 1900
10	532,231 KB	W10.TXT	532,231 KB	White Earth 1910
11	673,688 KB	W30A.TXT	673,688 KB	White Earth 1930
12	673,688 KB	W30B.TXT	673,688 KB	White Earth 1930

DISK 1 (626,526K)

V85.TXT	54-54	1 SEX	139-141	3 SPOCC	93	1 RATION
(171,718K)	55-56	2 BRTHMO	142-142	1 SPSPK	94	1 EMPSTAT
COLVILLE 1885	57-60	4 BRTHYR	143-144	2 NUMKID	95	1 UNEMP
1 1 BAND	61-62	2 AGE	145-145	1 NUMCH5	96-97	2 UNEMPWK
2-4 3 HHNO	63-63	1 MARSTA	146-147	2 OKID1	98	1 READ
5-6 2 FAMSZ	64-65	2 YRSMAR	148-149	2 OKID2	99	1 WRITE
7-8 2 RELAT	66-67	2 CHBORN	150-151	2 YKID	100	1 SCHOOL
9 1 SEX	68-69	2 CHLIVE	152-153	2 KIDS16	101	1 OWN
10-11 2 AGE	70-70	1 CHCODE	154-179	26 OTHER	102	1 MORT
12-13 2 HHREL	71-72	2 BPLACE			103	1 FARM
14-15 2 FKEY	73-74	2 FBPLAC	V10.TXT		104-105	2 OTHER
16-17 2 MKEY	75-76	2 MBPLAC	(243,037K)		106-107	2 TRIBE
18-19 2 SPKEY	77-79	3 OCCUP	COLVILLE 1910		108-109	2 FTRIBE
20-21 2 SPAGE	80-80	1 RATION	1-3 3 HHNO		110-111	2 MTRIBE
22-23 2 NUMKID	81-82	2 EMPMOS	4 1 INDSUPP		112-113	2 IBLOOD
24-24 1 NUMCH5	83-84	2 SCHOOL	5-6 2 TOWN		114-115	2 WBLOOD
25-26 2 OKID1	85-85	1 READ	7-8 2 ENUM		116-117	2 BBLOOD
27-28 2 OKID2	86-86	1 WRITE	9-10 2 ADDRESS		118	1 NUMMARR
29-30 2 YKID	87-87	1 SPEAK	11-13 3 DWELNO		119	1 POLYG
31-32 2 KIDS16	88-88	1 OWN	14 1 DWELSZ		120-121	2 GRAD
33-72 40 NAME	89-89	1 MORT	15-17 3 FAMNO		122	1 TAXED
73-102 30 ONAME	90-90	1 FARM	18-19 2 FAMSIZE		123-126	4 ALLOTYR
103-117 15 OTHER	91-91	1 NAM2TP	20 1 NAMETP		127	1 RESIDE
	92-111	20 NAME2	21-48 28 NAME		128	1 DWELTP
V00.TXT	112-113	2 TRIBE	49 1 NAM2TP		129-130	2 FKEY
(211,771K)	114-115	2 FTRIBE	50-68 19 NAME2		131-132	2 MKEY
COLVILLE 1900	116-117	2 MTRIBE	69-70 2 RELAT		133-134	2 SPKEY
1-4 4 HHNO	118-119	2 WBLOOD	71 1 SEX		135	1 EXT
5-5 1 INDSUP	120-120	1 POLYG	72 1 RACE		136-137	2 SPAGE
6-8 3 TOWN	121-121	1 TAXED	73-74 2 AGE		138-139	2 SPTRIBE
9-10 2 ENUM	122-125	4 CITYR	75 1 MARSTA		140-142	3 SPOCC
11-12 2 ADDRSS	126-126	1 CITALT	76-77 2 YRSMARR		143-144	2 SPLANG
13-15 3 DWELNO	127-127	1 DWELTP	78-79 2 CHBORN		145-146	2 NUMKIDS
16-16 1 DWELSZ	128-129	2 FKEY	80-81 2 CHALIVE		147	1 NUMCH5
17-19 3 FAMNO	130-131	2 MKEY	82-83 2 BPLACE		148-149	2 OKID1
20-21 2 FAMSZ	132-133	2 SPKEY	84-85 2 FBPLACE		150-151	2 OKID2
22-22 1 NAMTYP	134-134	1 EXT	86-87 2 MBPLACE		152-153	2 YKID
23-50 28 NAME	135-136	2 SPAGE	88-89 2 LANG		154-155	2 KIDS16
51-52 2 RELAT	137-138	2 SPTRIB	90-92 3 OCCUP			
53-53 1 RACE						

DISK 2 (707,434K)

K10.TXT (334,725K)

CREEK 1910
 1-3 3 HHNO
 4 1 INDSUPP
 5-6 2 TOWN
 7-8 2 ENUM
 9-10 2 ADDRESS
 11-13 3 DWELNO
 14 1 DWELSZ
 15-17 3 FAMNO
 18-19 2 FAMSIZE
 20 1 NAMETP
 21-48 28 NAME
 49 1 NAM2TP
 50-68 19 NAME2
 69-70 2 RELAT
 71 1 SEX
 72 1 RACE
 73-74 2 AGE
 75 1 MARSTA
 76-77 2 YRSMARR
 78-79 2 CHBORN
 80-81 2 CHALIVE
 82-83 2 BPLACE
 84-85 2 FBPLACE
 86-87 2 MBPLACE
 88-89 2 LANG
 90-92 3 OCCUP
 93 1 RATION
 94 1 EMPSTAT
 95 1 UNEMP
 96-97 2 UNEMPWKS
 98 1 READ

99 1 WRITE
 100 1 SCHOOL
 101 1 OWN
 102 1 MORT
 103 1 FARM
 104-105 2 OTHER
 106-107 2 TRIBE
 108-109 2 FTRIBE
 110-111 2 MTRIBE
 112-113 2 IBLOOD
 114-115 2 WBLOOD
 116-117 2 BBLOOD
 118 1 NUMMARR
 119 1 POLYG
 120-121 2 GRAD
 122 1 TAXED
 123-126 4 ALLOTYR
 127 1 RESIDENT
 128 1 DWELTYPE
 129-130 2 FKEY
 131-132 2 MKEY
 133-134 2 SPKEY
 135 1 EXT
 136-137 2 SPAGE
 138-139 2 SPTRIBE
 140-142 3 SPOCC
 143-144 2 SPLANG
 145-146 2 NUMKIDS
 147 1 NUMCH5
 148-149 2 OKID1
 150-151 2 OKID2
 152-153 2 YKID
 154-155 2 KIDS16

V30.TXT (372,709K)

COLVILLE 1930
 1 1 SUBGROUP
 2-5 4 HHNO
 6-7 2 FAMSIZE
 8-11 4 NUMBER
 12 1 SEX
 13-14 2 AGE
 15 1 IBLOOD
 16 1 MARSTA
 17 1 ATJURIS
 18-19 2 FKEY
 20-21 2 MKEY
 22-23 2 SPKEY
 24-25 2 SPAGE
 26-27 2 NUMKIDS
 28 1 NUMCH5
 29-30 2 OKID1
 31-32 2 OKID2
 33-34 2 YKID
 35-36 2 KIDS16
 37-54 18 SURNAME
 55-79 25 GIVENAME
 80-88 19 RELAT
 89-108 20 OTHER
 109-114 6 ALLOTNO

DISK 3 (680,141K)

K00A.TXT		85-85	1	READ
(680,141K)		86-86	1	WRITE
CREEK 1900		87-87	1	SPEAK
(CASES 1-4388)		88-88	1	OWN
1-4	4 HHNO	89-89	1	MORT
5-5	1 INDSUP	90-90	1	FARM
6-8	3 TOWN	91-91	1	NAM2TP
9-10	2 ENUM	92-111	20	NAME2
11-12	2 ADDRSS	112-113	2	TRIBE
13-15	3 DWELNO	114-115	2	FTRIBE
16-16	1 DWELSZ	116-117	2	MTRIBE
17-19	3 FAMNO	118-119	2	WBLOOD
20-21	2 FAMSZ	120-120	1	POLYG
22-22	1 NAMETP	121-121	1	TAXED
23-50	28 NAME	122-125	4	CITYR
51-52	2 RELAT	126-126	1	CITALT
53-53	1 RACE	127-127	1	DWELTP
54-54	1 SEX	128-129	2	FKEY
55-56	2 BRTHMO	130-131	2	MKEY
57-60	4 BRTHYR	132-133	2	SPKEY
61-62	2 AGE	134-134	1	EXT
63-63	1 MARSTA	135-136	2	SPAGE
64-65	2 YRSMAR	137-138	2	SPTRIB
66-67	2 CHBORN	139-141	3	SPOCC
68-69	2 CHLIVE	142-142	1	SPSPK
70-70	1 CHCODE	143-144	2	NUMKID
71-72	2 BPLACE	145-145	1	NUMCH5
73-74	2 FBPLAC	146-147	2	OKID1
75-76	2 MBPLAC	148-149	2	OKID2
77-79	3 OCCUP	150-151	2	YKID
80-80	1 RATION	152-153	2	KIDS16
81-82	2 EMPMOS			
83-84	2 SCHOOL			

DISK 4 (680,141K)

K00B.TXT		85-85	1	READ
(680,141K)		86-86	1	WRITE
CREEK 1900		87-87	1	SPEAK
(CASES 4389-8777)		88-88	1	OWN
1-4	4 HHNO	89-89	1	MORT
5-5	1 INDSUP	90-90	1	FARM
6-8	3 TOWN	91-91	1	NAM2TP
9-10	2 ENUM	92-111	20	NAME2
11-12	2 ADDRSS	112-113	2	TRIBE
13-15	3 DWELNO	114-115	2	FTRIBE
16-16	1 DWELSZ	116-117	2	MTRIBE
17-19	3 FAMNO	118-119	2	WBLOOD
20-21	2 FAMSIZ	120-120	1	POLYG
22-22	1 NAMETP	121-121	1	TAXED
23-50	28 NAME	122-125	4	CITYR
51-52	2 RELAT	126-126	1	CITALT
53-53	1 RACE	127-127	1	DWELTP
54-54	1 SEX	128-129	2	FKEY
55-56	2 BRTHMO	130-131	2	MKEY
57-60	4 BRTHYR	132-133	2	SPKEY
61-62	2 AGE	134-134	1	EXT
63-63	1 MARSTA	135-136	2	SPAGE
64-65	2 YRSMAR	137-138	2	SPTRIB
66-67	2 CHBORN	139-141	3	SPOCC
68-69	2 CHLIVE	142-142	1	SPSPK
70-70	1 CHCODE	143-144	2	NUMKID
71-72	2 BPLACE	145-145	1	NUMCH5
73-74	2 FBPLAC	146-147	2	OKID1
75-76	2 MBPLAC	148-149	2	OKID2
77-79	3 OCCUP	150-151	2	YKID
80-80	1 RATION	152-153	2	KIDS16
81-82	2 EMPMOS			
83-84	2 SCHOOL			

DISK 5 (546,343K)

C85.TXT (546,343K)

CROW 1885
 1 1 BAND
 2-4 3 HHNO
 5-6 2 FAMSIZE
 7-8 2 RELAT
 9 1 SEX
 10-11 2 AGE
 12-13 2 HHREL
 14-15 2 FKEY

16-17 2 MKEY
 18-19 2 SPKEY
 20-21 2 SPAGE
 22-23 2 NUMKIDS
 24-24 1 NUMCH5
 25-26 2 OKID1
 27-28 2 OKID2
 29-30 2 YKID
 31-32 2 KIDS16
 33-72 40 NAME

73-102 30 ONAME
 103 1 STATUS
 104 1 REMARRD
 105-108 4 DIEDYR
 109-115 7 DIEDDATE
 116-118 2 DIEDAGE
 119-125 7 TNUMBER
 126-129 4 ALLOTNO
 130-221 92 OTHER

DISK 6 (578,406K)

C00.TXT
 (290,781K)

CROW 1900
 1-4 4 HHNO
 5-5 1 INDSUP
 6-8 3 TOWN
 9-10 2 ENUM
 11-12 2 ADDRSS
 13-15 3 DWELNO
 16-16 1 DWELSZ
 17-19 3 FAMNO
 20-21 2 FAMSZ
 22-22 1 NAMETP
 23-50 28 NAME
 51-52 2 RELAT
 53-53 1 RACE
 54-54 1 SEX
 55-56 2 BRTHMO
 57-60 4 BRTHYR
 61-62 2 AGE
 63-63 1 MARSTA
 64-65 2 YRSMAR
 66-67 2 CHBORN
 68-69 2 CHLIVE
 70-70 1 CHCODE
 71-72 2 BPLACE
 73-74 2 FBPLAC
 75-76 2 MBPLAC
 77-79 3 OCCUP
 80-80 1 RATION
 81-82 2 EMPMOS
 83-84 2 SCHOOL

85-85 1 READ
 86-86 1 WRITE
 87-87 1 SPEAK
 88-88 1 OWN
 89-89 1 MORT
 90-90 1 FARM
 91-91 1 NAM2TP
 92-111 20 NAME2
 112-113 2 TRIBE
 114-115 2 FTRIBE
 116-117 2 MTRIBE
 118-119 2 WBLOOD
 120-120 1 POLYG
 121-121 1 TAXED
 122-125 4 CITYR
 126-126 1 CITALT
 127-127 1 DWELTP
 128-129 2 FKEY
 130-131 2 MKEY
 132-133 2 SPKEY
 134-134 1 EXT
 135-136 2 SPAGE
 137-138 2 SPTRIB
 139-141 3 SPOCC
 142-142 1 SPSPK
 143-144 2 NUMKID
 145-145 1 NUMCH5
 146-147 2 OKID1
 148-149 2 OKID2
 150-151 2 YKID
 152-153 2 KIDS16

C10.TXT
 (287,625K)

CROW 1910
 1-3 3 HHNO
 4 1 INDSUP
 5-6 2 TOWN
 7-8 2 ENUM
 9-10 2 ADDRESS
 11-13 3 DWELNO
 14 1 DWELSZ
 15-17 3 FAMNO
 18-19 2 FAMSIZE
 20 1 NAMETP
 21-48 28 NAME
 49 1 NAM2TP
 50-68 19 NAME2
 69-70 2 RELAT
 71 1 SEX
 72 1 RACE
 73-74 2 AGE
 75 1 MARSTA
 76-77 2 YRSMARR
 78-79 2 CHBORN
 80-81 2 CHALIVE
 82-83 2 BPLACE
 84-85 2 FBPLACE
 86-87 2 MBPLACE
 88-89 2 LANG
 90-92 3 OCCUP
 93 1 RATION
 94 1 EMPSTAT
 95 1 UNEMP
 96-97 2 UNEMPWK
 98 1 READ

99 1 WRITE
 100 1 SCHOOL
 101 1 OWN
 102 1 MORT
 103 1 FARM
 104-105 2 OTHER
 106-107 2 TRIBE
 108-109 2 FTRIBE
 110-111 2 MTRIBE
 112-113 2 IBLOOD
 114-115 2 WBLOOD
 116-117 2 BBLOOD
 118 1 NUMMARR
 119 1 POLYG
 120-121 2 GRAD
 122 1 TAXED
 123-126 4 ALLOTYR
 127 1 RESIDE
 128 1 DWELTP
 129-130 2 FKEY
 131-132 2 MKEY
 133-134 2 SPKEY
 135 1 EXT
 136-137 2 SPAGE
 138-139 2 SPTRIBE
 140-142 3 SPOCC
 143-144 2 SPLANG
 145-146 2 NUMKIDS
 147 1 NUMCH5
 148-149 2 OKID1
 150-151 2 OKID2
 152-153 2 YKID
 154-155 2 KIDS16

DISK 7 (725,429K)

C30.TXT		H85.TXT		H00.TXT		85-85	1 READ
(287,183K)		(133,825K)		(304,421K)		86-86	1 WRITE
CROW 1930		HOPI 1885		HOPI 1900		87-87	1 SPEAK
1 1 SUBGRP		1 1 BAND		1-4 4 HHNO		88-88	1 OWN
2-5 4 HHNO		2-4 3 HHNO		5-5 1 INDSUPP		89-89	1 MORT
6-7 2 FAMSIZE		5-6 2 FAMSIZE		6-8 3 TOWN		90-90	1 FARM
8-11 4 NUMBER		7-8 2 RELAT		9-10 2 ENUM		91-91	1 NAM2TP
12 1 SEX		9 1 SEX		11-12 2 ADDRESS		92-111	20 NAME2
13-14 2 AGE		10-11 2 AGE		13-15 3 DWELNO		112-113	2 TRIBE
15 1 IBLOOD		12-13 2 HHREL		16-16 1 DWELSZ		114-115	2 FTRIBE
16 1 MARSTA		14-15 2 FKEY		17-19 3 FAMNO		116-117	2 MTRIBE
17 1 ATJURIS		16-17 2 MKEY		20-21 2 FAMSIZE		118-119	2 WBLOOD
18-19 2 FKEY		18-19 2 SPKEY		22-22 1 NAMETP		120-120	1 POLYG
20-21 2 MKEY		20-21 2 SPAGE		23-50 28 NAME		121-121	1 TAXED
22-23 2 SPKEY		22-23 2 NUMKIDS		51-52 2 RELAT		122-125	4 CITYEAR
24-25 2 SPAGE		24-24 1 NUMCH5		53-53 1 RACE		126-126	1 CITALT
26-27 2 NUMKIDS		25-26 2 OKID1		54-54 1 SEX		127-127	1 DWELTP
28 1 NUMCH5		27-28 2 OKID2		55-56 2 BIRTHMO		128-129	2 FKEY
29-30 2 OKID1		29-30 2 YKID		57-60 4 BIRTHYR		130-131	2 MKEY
31-32 2 OKID2		31-32 2 KIDS16		61-62 2 AGE		132-133	2 SPKEY
33-34 2 YKID		33-72 40 NAME		63-63 1 MARSTA		134-134	1 EXT
35-36 2 KIDS16		73-102 30 ONAME		64-65 2 YRSMARR		135-136	2 SPAGE
37-54 18 SURNAME		103-117 15 OTHER		66-67 2 CHBORN		137-138	2 SPTRIBE
55-79 25 GIVENAM		118-121 4 NUMBER		68-69 2 CHALIVE		139-141	3 SPOCC
80-88 19 RELAT				70-70 1 CHCODE		142-142	1 SPSPEAK
89-105 17 PO				71-72 2 BPLACE		143-144	2 NUMKIDS
106-117 12 COUNTY				73-74 2 FBPLACE		145-145	1 NUMCH5
118-119 2 STATE				75-76 2 MBPLACE		146-147	2 OKID1
120-125 6 ALLOTNO				77-79 3 OCCUP		148-149	2 OKID2
126-130 5 MONTHS				80-80 1 RATION		150-151	2 YKID
131-134 4 ANNTNO				81-82 2 EMPMOS		152-153	2 KIDS16
				83-84 2 SCHOOL			

DISK 8 (698,994K)

H10.TXT (303,953K)

HOPI 1910
 1-3 3 HHNO
 4 1 INDSUPP
 5-6 2 TOWN
 7-8 2 ENUM
 9-10 2 ADDRESS
 11-13 3 DWELNO
 14 1 DWELSZ
 15-17 3 FAMNO
 18-19 2 FAMSIZE
 20 1 NAMETP
 21-48 28 NAME
 49 1 NAM2TP
 50-68 19 NAME2
 69-70 2 RELAT
 71 1 SEX
 72 1 RACE
 73-74 2 AGE
 75 1 MARSTA
 76-77 2 YRSMARR
 78-79 2 CHBORN
 80-81 2 CHALIVE
 82-83 2 BPLACE
 84-85 2 FBPLACE
 86-87 2 MBPLACE
 88-89 2 LANG
 90-92 3 OCCUP
 93 1 RATION
 94 1 EMPSTAT
 95 1 UNEMP
 96-97 2 UNEMPWKS
 98 1 READ

99 1 WRITE
 100 1 SCHOOL
 101 1 OWN
 102 1 MORT
 103 1 FARM
 104-105 2 OTHER
 106-107 2 TRIBE
 108-109 2 FTRIBE
 110-111 2 MTRIBE
 112-113 2 IBLOOD
 114-115 2 WBLOOD
 116-117 2 BBLOOD
 118 1 NUMMARR
 119 1 POLYG
 120-121 2 GRAD
 122 1 TAXED
 123-126 4 ALLOTYR
 127 1 RESIDENT
 128 1 DWELTYPE
 129-130 2 FKEY
 131-132 2 MKEY
 133-134 2 SPKEY
 135 1 EXT
 136-137 2 SPAGE
 138-139 2 SPTRIBE
 140-142 3 SPOCC
 143-144 2 SPLANG
 145-146 2 NUMKIDS
 147 1 NUMCH5
 148-149 2 OKID1
 150-151 2 OKID2
 152-153 2 YKID
 154-155 2 KIDS16

H30.TXT (395,041K)

HOPI 1930
 1 1 SUBGROUP
 2-5 4 HHNO
 6-7 2 FAMSIZE
 8-11 4 NUMBER
 12 1 SEX
 13-14 2 AGE
 15 1 IBLOOD
 16 1 MARSTA
 17 1 ATJURIS
 18-19 2 FKEY
 20-21 2 MKEY
 22-23 2 SPKEY
 24-25 2 SPAGE
 26-27 2 NUMKIDS
 28 1 NUMCH5
 29-30 2 OKID1
 31-32 2 OKID2
 33-34 2 YKID
 35-36 2 KIDS16
 37-54 18 SURNAME
 55-79 25 GIVENAME
 80-88 19 RELAT
 89-108 20 OTHER
 109-125 17 PO
 126-137 12 COUNTY
 138-139 2 STATE
 140-148 9 TRIBE

DISK 9 (730,112K)

W85.TXT (192,697K)		W00.TXT (535,825K)		86-86	1 WRITE
WHITE EARTH 1885		WHITE EARTH 1900		87-87	1 SPEAK
1	1 BAND	1-4	4 HHNO	88-88	1 OWN
2-4	3 HHNO	5-5	1 INDSUPP	89-89	1 MORT
5-6	2 FAMSIZE	6-8	3 TOWN	90-90	1 FARM
7-8	2 RELAT	9-10	2 ENUM	91-91	1 NAM2TP
9	1 SEX	11-12	2 ADDRESS	92-111	20 NAME2
10-11	2 AGE	13-15	3 DWELNO	112-113	2 TRIBE
12-13	2 HHREL	16-16	1 DWELSZ	114-115	2 FTRIBE
14-15	2 FKEY	17-19	3 FAMNO	116-117	2 MTRIBE
16-17	2 MKEY	20-21	2 FAMSIZE	118-119	2 WBLOOD
18-19	2 SPKEY	22-22	1 NAMETP	120-120	1 POLYG
20-21	2 SPAGE	23-50	28 NAME	121-121	1 TAXED
22-23	2 NUMKIDS	51-52	2 RELAT	122-125	4 CITYEAR
24-24	1 NUMCH5	53-53	1 RACE	126-126	1 CITALLLOT
25-26	2 OKID1	54-54	1 SEX	127-127	1 DWELTYPE
27-28	2 OKID2	55-56	2 BIRTHMO	128-129	2 FKEY
29-30	2 YKID	57-60	4 BIRTHYR	130-131	2 MKEY
31-32	2 KIDS16	61-62	2 AGE	132-133	2 SPKEY
33-67	35 NAME	63-63	1 MARSTA	134-134	1 EXT
68-92	25 ONAME	64-65	2 YRSMARR	135-136	2 SPAGE
93-107	15 OTHER	66-67	2 CHBORN	137-138	2 SPTRIBE
108	1 CHIEF	68-69	2 CHALIVE	139-141	3 SPOCC
109	1 NAMETP	70-70	1 CHCODE	142-142	1 SPSPEAK
		71-72	2 BPLACE	143-144	2 NUMKIDS
		73-74	2 FBPLACE	145-145	1 NUMCH5
		75-76	2 MBPLACE	146-147	2 OKID1
		77-79	3 OCCUP	148-149	2 OKID2
		80-80	1 RATION	150-151	2 YKID
		81-82	2 EMPMOS	152-153	2 KIDS16
		83-84	2 SCHOOL	154-179	26 OTHERBIA
		85-85	1 READ	180-181	2 BAND

DISK 10 (532.231K)

W10.TXT (532,231K)			
WHITE EARTH 1910			
1-3 3 HHNO	99	1	WRITE
4 1 INDSUPP	100	1	SCHOOL
5-6 2 TOWN	101	1	OWN
7-8 2 ENUM	102	1	MORT
9-10 2 ADDRESS	103	1	FARM
11-13 3 DWELNO	104-105	2	OTHER
14 1 DWELSZ	106-107	2	TRIBE
15-17 3 FAMNO	108-109	2	FTRIBE
18-19 2 FAMSIZE	110-111	2	MTRIBE
20 1 NAMETP	112-113	2	IBLOOD
21-48 28 NAME	114-115	2	WBLOOD
49 1 NAM2TP	116-117	2	BBLOOD
50-68 19 NAME2	118	1	NUMMARR
69-70 2 RELAT	119	1	POLYG
71 1 SEX	120-121	2	GRAD
72 1 RACE	122	1	TAXED
73-74 2 AGE	123-126	4	ALLOTYR
75 1 MARSTA	127	1	RESIDENT
76-77 2 YRSMARR	128	1	DWELTYPE
78-79 2 CHBORN	129-130	2	FKEY
80-81 2 CHALIVE	131-132	2	MKEY
82-83 2 BPLACE	133-134	2	SPKEY
84-85 2 FBPLACE	135	1	EXT
86-87 2 MBPLACE	136-137	2	SPAGE
88-89 2 LANG	138-139	2	SPTRIBE
90-92 3 OCCUP	140-142	3	SPOCC
93 1 RATION	143-144	2	SPLANG
94 1 EMPSTAT	145-146	2	NUMKIDS
95 1 UNEMP	147	1	NUMCH5
96-97 2 UNEMPWKS	148-149	2	OKID1
98 1 READ	150-151	2	OKID2
	152-153	2	YKID
	154-155	2	KIDS16

DISK 11 (673,688K)

W30A.TXT (673,688K)		24-25	2	SPAGE
WHITE EARTH 1930		26-27	2	NUMKIDS
(CASES 1-4291)		28	1	NUMCH5
1	1	29-30	2	OKID1
2-5	4	31-32	2	OKID2
6-7	2	33-34	2	YKID
8-11	4	35-36	2	KIDS16
12	1	37-54	18	SURNAME
13-14	2	55-79	25	GIVENAME
15	1	80-88	19	RELAT
16	1	89-108	20	OTHER
17	1	109-125	17	PO
18-19	2	126-137	12	COUNTY
20-21	2	138-139	2	STATE
22-23	2	140-145	6	ALLOTNO

DISK 12 (673,688K)

W30B.TXT (673,688K)		24-25	2	SPAGE
WHITE EARTH 1930		26-27	2	NUMKIDS
(CASES 4292-8582)		28	1	NUMCH5
1	1	29-30	2	OKID1
2-5	4	31-32	2	OKID2
6-7	2	33-34	2	YKID
8-11	4	35-36	2	KIDS16
12	1	37-54	18	SURNAME
13-14	2	55-79	25	GIVENAME
15	1	80-88	19	RELAT
16	1	89-108	20	OTHER
17	1	109-125	17	PO
18-19	2	126-137	12	COUNTY
20-21	2	138-139	2	STATE
22-23	2	140-145	6	ALLOTNO

NUMBER 9

REPORTS OF THE AMERICAN INDIAN FAMILY HISTORY PROJECT
Part 2: MARRIAGE; Part 3: HOUSEHOLDS; Part 4: FERTILITY
Richard A. Sattler, Frederick E. Hoxie

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REPORTS OF THE AMERICAN INDIAN FAMILY HISTORY PROJECT

BY

Richard A. Sattler

Frederick E. Hoxie

PART TWO: MARRIAGE

1992

TABLE OF CONTENTS

I.	INTRODUCTION	1
	A. General Sampling Issues and the Definition of Subpopulations	1
	B. Grouping Variables and Associations	3
	C. Subgroup Comparisons	12
	D. Estimating Age at Marriage	12
	E. Age Differences Between Spouses	14
	F. Exogamy and Endogamy	15
	G. Marital Status	16
	H. Change Over Time	17
II.	PROFILES OF TRIBAL MARRIAGE PATTERNS	18
	A. Colville	18
	B. Creek	27
	C. Crow	37
	D. Hopi	45
	E. White Earth	52
III.	COMPARISONS BETWEEN TRIBES	64
IV.	CONCLUSIONS	71

I. INTRODUCTION: THE ANALYSIS OF MARRIAGE PATTERNS

Following the creation and organization of the data sets, the Family History Project staff turned first to the analysis of marriage patterns within each of the five tribes. Several aspects of these were examined, including age at first marriage, age differences between spouses, patterns of endogamy and exogamy (at the tribal level), marital status in the life cycle, and the number and duration of marriages. Patterning of these aspects was analyzed for each tribe on all censuses. For each tribe, several social factors were examined for their possible impact on synchronic patterning of variation in marriage patterns. Where possible, we also tracked the effects of these variables through time.

A. General Sampling Issues and the Definition of Subpopulations

Descriptive statistics were produced for each tribe on each census as a whole and broken down by sex. To examine synchronic, internal patterning of variation several variables were chosen for comparison. Choice of comparison variables was based on two factors: the apparent likelihood that they would be associated with significant differences in social behavior and the ability

of the variables to produce adequate comparison samples. The latter proved somewhat problematic. Any variable on which there was little or no variability was discarded from consideration.

For several variables which showed considerable variation, we were forced to aggregate values in order to produce meaningful samples. In this process, sample populations of less than ten were automatically discarded and those less than twenty were avoided whenever possible. Aggregation followed logical lines in the absence of reliable cultural information. For example, the values on the variable "OCCUPATION" were aggregated into ten categories: 'none', 'farmer/rancher', 'farm worker', 'native government', 'native trades', 'US govt.', 'professional', 'labor/service', 'skilled', and 'mercantile'. A complete listing of changes made can be found in Part One of this Occasional Paper.

Sample subpopulations varied from tribe to tribe and from census to census. For 1885, only band was available for any tribe. In general, potential grouping variables were rejected only if there was insufficient variation or subpopulations fell too low. The specific grouping variables used in the analysis of marriage patterns are described in the section below and summarized for each tribe in Tables I-V.

B. GROUPING VARIABLES AND ASSOCIATIONS

COLVILLE

The Colville Reservation comprises several tribes speaking languages belonging to two separate families. At Colville, band (actually tribe) defined subpopulations in 1885. In 1900, differences on several variables created subpopulations.¹ These include town (actually county) of residence, occupation, whether the person accepted government rations, school attendance, literacy, ability to speak English, whether the farm or home schedule was selected, tribe, degree of white blood, type of dwelling, whether the individual was exogamously married, whether their parents were exogamous, and the generations of exogamy. Town, occupation, literacy, census schedule selected, tribe, degree of white blood, and patterns of exogamy continued to define subpopulations in 1910. School graduation and language spoken replaced school attendance and ability to speak English. Dwelling type ceased to be significant on this census. Additional subpopulations derived from employment status, residence on the reservation, and degree of Indian blood. In 1930, residence at jurisdiction and degree of Indian blood defined the subpopulations. While subgroup is listed as a category on this census, everyone is simply designated Colville.

¹ While mentioned previously, it is important to remind readers that with the reorganization of the Colville Agency in the 1890s it is difficult to link any 1885 subgroup other than Nez Perces with subgroups in 1900.

Table I: Grouping Variables and Associations, Colville

YEAR	VAR	VAL RNG	MAR AGE	AGE DIF	EXO	NUM MAR	MAR STA	MN AGE
1886	Band	1-6	X	X	-	-		X
1900	Twn	1-2				-		
	Rat	1-2				-		
	Occ	0-9			X	-	X	
	Sch	0-1				-		
	Liter	0-1			X	-	X	
	Spk	1-2			X	-	X	
	Farm	1-3			X	-		
	Tribe	0-12	X		X	-	X	X
	Wbld	0-2		X		-		X
	Dwltp	1-3				-	X	
	Exog	0-1		X	-	-		
	Pexog	0-1				-		
	Genex	0-2				-		
1910	Twn	1-9			X	X	X	X
	Occ	0-9			X	X	X	
	Lang	1-3				X	X	X
	Grad	0-1						
	Liter	0-1			X	X	X	X
	Empsta	1-3						
	Res	1-2			X			X
	Farm	0-3			X			
	Tribe	0-8			X			
	Wbld	0-2		X	X	X	X	X
	Ibld	0-2			X	X	X	X
	Exog	0-1			-			
	Pexog	0-1						
	Genex	0-2						
1930	Ibld	0-5	X		-	-	X	X

CREEKS

The Creeks are socially the most diverse, as well as the largest, of the tribes included in the study. No census was available for them in 1885 or 1930, but the 1900 and 1910 federal censuses were available. For 1900, all Creeks are included using the Creek Nation returns. Because of the size of the population, the 1910 census was sampled. All Creeks living in Okmulgee and Okfuskee counties were included along with members of their households. Place of residence ("Town"), occupation, race, school attendance, literacy, ability to speak English, choice of farm or house schedule, tribe, degree of white blood, degree of black blood, personal exogamy, parental exogamy, and generations of exogamy all created subpopulations in 1900. All of these were represented in 1910, with the addition of residence on own land, and employment status.

TABLE II: GROUPING VARIABLES AND ASSOCIATIONS, CREEK

YEAR	VAR	VAL RNG	MAR AGE	AGE DIF	EXO	NUM MAR	MAR STA	MN AGE
1900	Twn	1-9	X	X	X	-	X	X
	Occ	0-9	X	X	X	-	X	X
	Sch	0-1				-	X	
	Liter	0-1		X	X	-	X	
	Spk	1-2			X	-	X	
	Farm	1-2			X	-		
	Tribe	1-10	X		X	-	X	X
	Wbld	0-2	X	X	X	-	X	X
	Bbld	0-2			X	-		
	Exog	0-1			-	-		
	Pexog	0-1			X	-		
	Genex	0-2				-		
1910	Twn	1-16			X	X		
	Occ	0-9		X	X	X	X	
	Grad	0-1						X
	Liter	0-1			X	X	X	X
	Lang	0-2			X	X		X
	Res	1-2		X	X	X	X	X
	Empsta	1-3			X	X	X	
	Farm	1-3				X		
	Wbld	0-2			X	X	X	X
	Ibld	0-2			X	X	X	X
	Bbld	0-2				X		
	Exog	0-1			-	X		
	Pexog	0-1			X	X		
	Genex	0-2				X		

CROW

The Crow are a relatively homogeneous group with relatively few suitable grouping variables. Variables such as band, subgroup, or town, which are present on the census schedules for other tribes are not available in the Crow enumerations. As a consequence, there are no grouping variables for Crow in 1886. Occupation, acceptance of rations, school attendance, literacy, ability to speak English, degree of white blood, type of dwelling, and personal and parental exogamy were used to create subpopulations on the 1900 census. In addition to these variables, residence on own lands, and employment status were used on the 1910 census. Acceptance of rations was dropped. In 1930, residence at the jurisdiction and degree of Indian blood marked the subpopulations. In most cases for the Crow, there was generally one large population comprising most of the Crow and one or more much smaller populations.

TABLE III: GROUPING VARIABLES AND ASSOCIATIONS, CROW

YEAR	VAR	VAL RNG	MAR AGE	AGE DIF	EXO	NUM MAR	MAR STA	MN AGE
1885					-	-		
1900	Occ	0-9		X	X	-	X	X
	Rat	1-2		X	X	-	X	
	Sch	0-1	X		X	-	X	
	Liter	0-1	X	X	X	-	X	
	Spk	1-2	X	X	X	-	X	
	Farm	1-2				-		
	Wbld	0-2			X	-		
	Dwltp	0-3			X	-	X	X
	Exog	0-1		X	-	-		
	Pexog	0-1			X	-		
1910	Occ	0-9				X	X	X
	Grad	0-1		X		X	X	X
	Liter	0-1		X	X	X	X	X
	Lang	0-3			X			X
	Empsta	1-3				X	X	
	Farm	1-3						
	Res	1-2		X				X
	Rat	1-2						
	Wbld	0-2	X		X	X	X	X
	Ibld	0-2	X		X	X	X	X
	Dwltp	0-2					X	
	Exog	0-1			-			
	Pexog	0-1				X	X	
1930	Atjur	1-2			-	-	X	
	Ibld	0-5			-	-	X	

HOPI

The Hopi, while relatively homogeneous were divided into subpopulations based on several variables on each census. Band (actually village) constituted the only grouping variable in 1885. In 1900, the grouping variables included town, occupation, school attendance, literacy, ability to speak English, and whether they used a farm or household schedule on the census. Town, occupation, and literacy continued in 1910, while ability to speak English changed to language spoken and school graduation replaced school attendance. Employment status and whether the individual resided their own lands constituted new grouping variables on this census. In 1930, subgroup (village) and residence at the reservation defined the subpopulations for the Hopi.

TABLE IV: GROUPING VARIABLES AND ASSOCIATIONS, HOPI

YEAR	VAR	VAL RNG	MAR AGE	AGE DIF	EXO	NUM MAR	MAR STA	MN AGE
1886	Band	1-6			-	-		X
1900	Twn	1-6	X	X	-	-	X	
	Occ	0-9			-	-	X	
	Sch	0-1			-	-		
	Liter	0-1			-	-	X	
	Spk	0-1			-	-	X	
	Farm	1-2	X	X	-	-		
1910	Twn	1-9	X	X	-	X	X	
	Occ	0-9			-		X	
	Grad	0-1			-	X		
	Liter	0-1			-	X	X	
	Lang	0-2			-	X	X	
	Empsta	1-3			-		X	
	Res	1-2			-	X		
	Farm	1-3			-			
	Dwltp	1-2			-	X		
1930	Subgrp	1-9	X	X	-	-		X
	Atjur	1-3			-	-	X	

WHITE EARTH

The White Earth Ojibwa are a socially diverse group, comprising several bands of a single tribe. As in the other cases, subgroups were based only on band for 1885. In 1900, place of residence, occupation, school attendance, literacy, ability to speak English, acceptance of government rations, type of dwelling, farm or household census schedule, band, degree of white blood, personal and parental exogamy, and generations of exogamy all contributed to the creation of subgroups. All of these, except type of dwelling and acceptance of rations, played a role in 1910 as well. (While the reassignment of groups did not occur here as it did at Colville, it is still extremely difficult to link the "bands" of 1885 and 1900.) Employment status, residence on own lands, and degree of Indian blood also served to create subgroups on that census. In 1930, subgroup (band), residence at the jurisdiction, and degree of Indian blood served as the basis for subpopulations.

TABLE V: GROUPING VARIABLES AND ASSOCIATIONS, WHITE EARTH

YEAR	VAR	VAL RNG	MAR AGE	AGE DIF	EXO	NUM MAR	MAR STA	MN AGE
1885	Band	1-3			-	-		
1900	Twtn	1-5	X			-	X	
	Occ	0-9	X	X	X	-	X	
	Sch	0-1				-		
	Liter	0-1			X	-	X	
	Spk	1-2			X	-		
	Farm	1-3			X	-		
	Rat	1-2			X	-		
	Wbld	0-2			X	-	X	
	Dwltp	1-3				-		
	Band	0-11	X		X	-	X	
	Exog	0-1		X	-	-		
	Pexog	0-1			X	-		
	Genex	0-2				-		
1910	Twtn	1-3				X	X	
	Occ	0-9			X	X	X	
	Grad	0-1						
	Liter	0-1		X	X	X	X	
	Lang	0-3			X	X	X	
	Res	1-2		X	X	X	X	
	Rat	1-2	X		x	X		
	Empsta	1-3			X		X	
	Farm	1-3			X			
	Wbld	0-2			X	X	X	
	Ibld	0-2			X	X	X	
	Exog	0-1			-			
	Pexog	0-1			X	X		
	Genex	0-2						
1930	Subgrp	1-8	X		-	-	X	X
	Atjur	1-2			-	-	X	
	Ibld	0-5			-	-		

C. SUBGROUP COMPARISONS

We compared sample populations based on the values of comparison variables using one-way analysis of variance for continuous, interval-level or better data (such as age, marriage age, and age differences). Significance (at the .05 level) was determined using the least-significant difference and honestly significant difference methods. From this procedure it was possible to determine which, if any, of the comparison variables contributed to or was associated with differences in marriage behavior. For nominal or ordinal data (such as marital status or exogamy), we used the chi-square measure of association (with a .05 level of significance) to determine relationships among variables.

D. ESTIMATING AGE AT MARRIAGE

Age at first marriage was not given on any of the censuses, so it was necessary to estimate this variable. Two measures for age at marriage were readily available in the data. The first comes from subtracting the age of the oldest child in the household plus one year for conception and pregnancy from the age of the parent [AGE-(OKID1+1)]. This measure was available on all censuses. The second measure derives from subtracting the number

of years married from the age (AGE-YRSMARR). This measure was available only on the 1900 and 1910 Federal censuses. Both measures have advantages and limitations. Using years married as an estimate of age at marriage is by far a more direct measure, but is available on only half of the censuses. Age of oldest child is less direct, but is available on all censuses and can account for previous as well as present marriages. Both measures systematically distort the data in different ways. The years married measure is most reliable for current marriages and less so for those who are divorced or widowed. The former are undoubtedly under represented by this measure, and the estimated age at marriage for the latter is distorted by the length of time they have been widowed. The oldest child measure on the other hand excludes persons without children in the home and cannot distinguish between children born out of wedlock and those from prior marriages. It is further distorted for older persons by the age at which children leave home and our inability to link parents to children not in the household. Infant and juvenile mortality can also bias this measure in a similar manner. Because the time between marriage and birth of the first child is determined by a wide variety of cultural and physiological variables, the estimate of an average of one year for this process may also be biased, even though we have no direct evidence of this.

A comparison of the two measures on the 1900 and 1910 census showed that there was no significant difference between the two

in estimating the mean age at marriage. This fact supports the reliability of each method as a measure of this variable, despite the fact that each samples different, though overlapping, populations. While only the oldest child measure could be used for the 1885 and 1930 census, it was determined to use the years married measure on the 1900 and 1910 censuses. This is a more direct measure and it produced a somewhat larger sample population.

In order to reduce sampling errors on both measures, the analytic sample was limited to those persons under thirty-five (35) years of age. This limits the effects of remarriage (or divorce and widowhood), mortality, and children leaving home. It also reduces the effects of vague or inaccurate reporting of time (age clumping becomes more pronounced over 35 for all censuses).

The analysis of internal variation was conducted for all tribes on all censuses. Likewise, a time-series regression was performed to determine changes through time for each tribe. A summary of the results for each tribe follows below.

E. AGE DIFFERENCES BETWEEN SPOUSES

Age difference was estimated through subtracting the spouse's age from the individual's own age. This measure, unfortunately, was available only in those cases where the spouses were coresident. This measure is subject to systematic

error only in errors in reporting ages. The measure produces a positive number for an individual older than their spouse and a negative number for those younger than their spouse. The sampling population used for analysis includes everyone on the censuses for whom there is an age difference.

F. EXOGENY AND ENDOGENY

Because the censuses provided little information on internal subdivisions such as clan or band, it was only possible to study tribal exogamy in this analysis. This was determined through comparing an individual's tribe to that of their spouse, if the two were the same then EXOGAMY=0, otherwise EXOGAMY=1. Comparable data were collected for each individual's parents by comparing father's tribe to that of mother. Overall rates (frequencies) of exogamy for both the present and parental generations were obtained, as were rates of marriage to specific groups or tribes (where exogamy was present). Grouping variables were tested against exogamy and parental exogamy to determine any meaningful associations. A further test was run (using the Chi-square statistic) to determine if there was a significant relationship between parental and personal exogamy. The sample populations include everyone for whom these measures are not missing.

G. MARITAL STATUS

All of the censuses except 1885 give the marital status of each individual. A simple procedure created marital statuses for persons on the 1885 census. All persons with a spouse listed were assigned the status "married." Those people with children, but no spouse listed were placed in the category "previously married." People lacking both children and spouses were given the status "single." The age structure of each marital status was obtained by generating the frequency of persons within given age ranges (at five year intervals) for each marital status (Married-spouse present, Married-spouse absent, Widowed, Divorced, Single, and Separated). Also, the percentage of persons in each marital status was computed for each ten-year cohort. Finally, the number of marriages per person was examined for the 1910 census, which is the only census to give this information.

A chi-square test was used to determine whether values on any of the grouping variables was significantly associated with differences in marital statuses. Because of an obvious, systematic bias deriving from relative age, the sample for this test was limited to persons 15-29 years of age. Oneway analysis of variance was used to detect similar relationships to the number of marriages per person.

H. CHANGE OVER TIME

The time series analysis shows a general trend for most groups. The exceptions are White Earth, for whom no trend appeared, and the Creek, for whom we had only two data sets. The trends detected here may well be misleading for several reasons. First, numerical data tend to mask shifts in subgroups such as those occurring at Colville and White Earth when those two agencies were being established. In addition, patterns such as the observed decline and rebound in age at marriage for men and women in all groups may reflect something occurring locally that is unrelated to marriage behavior. It also could be a reflection of statistical errors such as age heaping or the incorrect recording of marriage dates. Longer time series might not show such a linear relationship between age at marriage and the passage of time.

II. Profiles of Tribal Marriage patterns

A. COLVILLE

At Colville, age at first marriage appeared to rise for both men and women between 1885 and 1930. Knowing that the 1910 data are weak, we should discount the "drop" in women's age at first marriage recorded then, as well as the "decline" in this measure for men between 1910 and 1930. Another reason to trust the general trend of a rising age at first marriage is the fact that during the period under study variability on this measure did not change significantly. Except for the problematic census of 1910, the standard deviations for this variable were mostly under 4.0, indicating that behavior within the tribe was quite uniform. For a summary of these statistics, see Table VI.

While the 1885 and 1900 statistics reveal differences in age at first marriage between tribal groups at Colville, mean age difference between spouses also appeared to increase for all subgroups between 1885 and 1930. Several difficulties are apparent here, however. Most significant (besides the persisting worries over the 1910 enumeration) is the impossibility of linking subgroups between 1885 and 1900 because of the reorganization of the agency (Spokanes and Coeur d'Alenes were reassigned; other groups arrived and "Lakes" became known by

YEAR	VAR	VALUE	SEX	MEAN	STD	N
1885	ALL		Men	20.7	3.8	85
			Women	18.0	3.7	113
	Band	Couer de Alene	Men	20.65	2.37	20
			Women	18.82	2.61	28
		Calispel	Men	21.40	3.69	10
			Women	16.83	4.13	12
		Lake	Men	23.57	2.59	14
			Women	20.11	2.18	19
		Deep Creek Spokane	Men	23.80	3.96	5
			Women	21.17	5.27	6
		Lower Spokane	Men	18.71	3.76	28
			Women	16.17	3.17	36
		Nez Perce	Men	19.88	4.88	8
			Women	18.08	5.20	12
1900	ALL		Men	22.0	4.0	65
			Women	19.1	3.1	95
	Tribe	Nez Perce	Women	18.64	4.34	14
		Colville	Women	19.19	2.33	26
		Columbia	Women	18.11	3.01	28
		Okanagan	Women	20.69	2.68	16
1910	ALL		Men	22.4	4.0	48
			Women	18.2	4.9	73
1930	ALL		Men	21.7	3.3	68
			Women	18.9	3.3	169
	Ibld	2	Men	22.86	3.77	28
		4	Men	21.00	2.75	38

Table VI. Marriage Age
COLVILLE

another name). Nevertheless, tracking the available individual subgroups between 1900 and 1910 and following the overall average age difference (which rose from 4.4 in 1885 to 5.2 in 1930), it would seem that a general increase in marriage difference was taking place. In addition, it should be noted that there appeared to be a dramatic difference in this measure between tribal members of mixed ancestry and those whose "white blood" quantum was recorded as "none." Data on age differences between spouses

YEAR	VAR	VALUE	MEAN	STD	N
1885	Band	Couer de Alene	3.27	4.32	234
		Calispel	4.27	8.22	60
		Lake	5.5	6.00	144
		Deep Creek	1.81	3.67	32
		Spokane			
		Lower Spokane	4.69	8.34	172
		Nez Perce	7.23	8.55	62
			4.4	6.7	704
		ALL			
		Tribe			
1900	Tribe	Nez Perce	4.61	3.36	28
		Colville	4.07	5.88	59
		Columbia	5.54	5.83	71
		Okanagan	4.98	7.04	40
		Sanpoil	6.61	10.91	36
		Nespelem	3.90	9.31	10
	Wbld	None	5.25	7.14	465
		Mixed	2.31	4.64	23
			5.3	7.3	510
		ALL			
1910	Tribe	Palouse	4.19	6.22	16
		Nez Perce	8.87	13.69	15
		Colville	5.51	6.67	74
		Columbia	5.93	7.82	44
		Okanagan	6.21	8.28	48
		Sanpoil/Nespelem	5.52	7.77	42
	Wbld	None	5.36	7.92	407
		Mixed	8.16	8.14	126
			5.9	8.0	562
		ALL			
1930	ALL		5.2	9.0	562

Table VII. Age Differences
COLVILLE

are summarized in Table VII.

Table VIII, describing the marital status of 15-29 year-olds at Colville, shows that a rising percentage of young men were reported as single between 1885 and 1930. This measure did not rise significantly for women until the 1930 census, suggesting a reason for the rise in the age difference between spouses for the same period that was indicated in Table VII: men were marrying later, but not women. The many subgroups analyzed in Table VIII

suggests some of the reasons for these shifting measures. In 1900, the subgroups with the highest numbers of members reported as single were individuals who were literate (both male and female), those who spoke English and those who lived in "fixed dwellings." This pattern was repeated for men in 1910, but not for women. Alternatively, those groups with the largest proportion of "married" members were those who lived in "movable" homes and females who were neither literate nor English speakers. Significantly, subgroups based on blood quantum showed relatively

YEAR	VAR	VALUES	MAR	WID	SING	N
1885	Sex	Males	48.8	1.8	49.4	721
		Females	50.2	5.4	44.4	701
1900	Sex	Males	45.4	6.0	48.6	549
		Females	42.8	19.8	37.5	611
	Occ	None (m)	6.7	0.0	93.3	30
		Farm (m)	94.7	0.0	5.3	19
		Nat. Trades (m)	71.4	0.0	28.6	14
	Liter	Yes (m)	17.8	0.0	82.1	28
		(f)	17.4	8.7	73.9	23
		No (m)	29.4	0.0	70.6	102
		(f)	53.5	4.0	42.6	101
	Spk	Yes (m)	23.0	0.0	76.9	39
		(f)	20.0	6.7	73.3	30
		No (m)	28.6	0.0	71.4	91
		(f)	55.4	4.3	40.4	94
	Tribe	Nez Perce (f)	100.0	0.0	0.0	9
		Colville (f)	42.4	9.1	48.5	33
		Columbia (f)	55.9	2.9	41.2	34
		Okanagan (f)	42.9	4.8	52.4	21
		Sanpoil (f)	22.7	4.5	72.7	22
		Nespelem (f)	25.0	0.0	75.0	4
	Dwltp	Fixed (f)	40.2	3.3	56.5	92
		Movable	65.6	9.4	25.0	32

Table VIII. Marital Status of 15-29 Year Olds (Percentage)
COLVILLE

YEAR	VAR	VALUES	MAR	WID	SING	N
1910	Sex	Male	24.7	4.2	70.5	1480
		Female	54.1	8.3	36.9	1478
	Twn	Republic/Curlew	42.9	0.0	57.1	7
		/Faroda (f)				
		Danville/Orient	25.0	0.0	75.0	8
		/Malo/Lake				
		Keller	41.2	17.6	41.2	17
		Meteor	42.9	4.1	51.0	49
		Molson/Bodie	100.0	0.0	0.0	4
		/Chesaw/Loomis				
		Aeneas/Columbia	0.0	0.0	100.0	2
		/Pateros				
		Okanogan	72.7	9.1	18.2	11
		Nespelem	60.0	15.6	24.4	45
		Omak	92.9	0.0	7.1	14
	Occ	None (m)	19.7	1.3	78.9	76
		(f)	48.9	5.3	44.7	94
		Farm/Rancher(m)	57.2	3.6	39.3	28
		(f)	90.0	10.0	0.0	10
		Farm Worker (m)	8.3	0.0	83.3	12
		U.S. Govern.(m)	100.0	0.0	0.0	1
		Labor/Serv. (m)	40.0	0.0	60.0	5
		(f)	50.0	0.0	50.0	2
		Skilled Lab.(m)	40.0	20.0	40.0	5
		Mercantile (m)	100.0	0.0	0.0	1
	Liter	Yes (m)	22.8	2.9	72.9	70
		(f)	61.2	0.0	38.8	49
		No (m)	57.2	7.1	35.7	14
		(f)	57.1	28.6	14.3	21
	Lang	English (m)	21.2	1.5	76.5	132
		(f)	48.3	4.3	46.6	116
		Indian (m)	33.7	14.8	44.4	27
		(f)	68.6	22.9	8.6	35
	Wbld	None (f)	54.7	13.4	32.0	97
		Mixed (f)	52.6	0.0	45.8	59
1930	Sex	Males	26.4	3.6	69.7	1480
		Females	36.7	9.2	53.9	1478
	Ibld	< 1/4 (f)	41.6	0.0	58.3	60
		>/= 1/4 (f)	39.7	0.5	59.8	184
		Full	39.7	0.0	60.1	158

Table VIII. Marital Status of 15-29 Year Olds (Percentage)
COLVILLE

little variation in either the 1900 or 1930 census. It would seem, therefore, that a series of social factors--such as education or employment--would incline men to marry later. Finally, it would seem that, regardless of their racial background, the Colville women least involved in education were most likely to marry early. To illustrate this point, the 1910 census reported that 22.9% of the 15 to 29 year-old women who were reported as speaking "Indian" rather than English were widows.

Table IX reveals that rate of tribal exogamy increased six-fold between 1900 and 1910, with about the same rates for both men and women. As with Table VIII on marriage rates, this measure appeared to differ most dramatically among subgroups defined by social condition. In 1900, nearly a third of the twenty-six literate men on the reservation had married women from elsewhere while only three of the 225 nonliterate men at Colville had done so. The proportion shifted somewhat in 1910, but subgroups with the highest rates of exogamy remained constant: skilled laborers, literate males and farmworkers. Rates of exogamy varied less for subgroups defined by tribe or race.

The number of marriages per person in 1910 was related to locality, occupation, language spoken, literacy, and degree of white or Indian blood (see Table X.) Given the relatively high rates of widowhood among "fullblood" Colvilles reported in the 1910 census (13.4%) as well as among women who did not speak English (22.9%), it should not be surprising that these subgroups

reported more marriages. It would appear that these groups married early and suffered high rates of mortality.

YEAR	VAR	VALUE	SX	%EXOG	N
1900	ALL		M	4.4	252
			F	4.7	258
	Occ	None	M	7.1	14
		Farmer/Rancher	M	.6	173
		Native Trades	M	0.0	41
		Skilled Labor	M	50.0	2
	Tribe	Nez Perce	M	7.1	28
			F	0.0	28
		Colville	M	0.0	59
			F	7.9	63
		Columbia	M	1.4	71
			F	0.0	72
		Okanagan	M	0.0	40
			F	9.1	44
		Nespelem	M	0.0	10
			F	0.0	10
		Sanpoil	M	0.0	36
			F	2.6	39
	Liter	Yes	M	30.8	26
		No	M	1.3	225
	Spk	Yes	M	19.0	42
			F	20.0	15
		No	M	1.4	209
			F	3.8	240

Table IX. Exogamy 1900
COLVILLE

YEAR	VAR	VALUE	SX	%EXOG	N
1910	ALL		M	26.9	286
			F	26.9	286
	Town	Sanpoil	A	23.1	26
		Colville		30.0	20
		Keller		14.3	70
		Meteor		10.0	140
		Okanagan		28.6	14
		Okanagan II		44.4	36
		Nespelem		40.6	212
		Omak		22.2	36
		Other		22.2	18
	Occ	None	M	5.3	114
		Farmer/Rancher		38.7	111
		Farm Worker		66.7	12
		Native Government		100	1
		Native Trades		33.0	3
		U.S. Government		0.0	2
		Labor/Service		33.3	9
		Skilled Labor		66.7	6
		Mercantile		100	1
	Liter	Yes	M	60.3	58
		No		30.9	81
	Farm	Farm	M	41.2	85
		House		18.6	156
	Res	Yes	M	22.2	36
			F	25.0	28
		No	M	4.0	101
			F	4.0	99
	Tribe	Palouse	M	43.8	16
			F	43.8	16
		Nez Perce	M	40.0	15
			F	25.0	12
		Colville	M	4.0	75
			F	14.3	84
		Columbia	M	31.8	44
			F	28.6	42
		Okanagan	M	28.6	49
			F	18.6	43
		Sanpoil/Nespelem	M	9.1	44
			F	23.1	52
	Wbld	None	M	20.1	199
			F	22.4	214
		Mixed	M	28.1	64
			F	36.9	65
	Pexog	Yes	F	37.1	70
		No	F	23.5	213

Table IX (cont.). Exogamy 1910
COLVILLE

VAR	VALUE	MALES			FEMALES		
		MEAN	STD	N	MEAN	STD	N
All		1.10	.58	212	1.11	.55	253
Twn	Republic/Curlew/ Faroda	0.62	.78	34	0.89	1.03	28
	Danville/Orient/Malo	1.08	.51	12	1.09	.70	11
	Molson/Bodie/Loomis	1.20	.63	10	1.21	.70	14
	Aeneas/Columbia/ Pateros	0.90	.88	10	0.85	.69	13
	Okanagan	1.29	.47	17	1.14	.36	21
	Nespelem	1.20	.42	112	1.13	.36	136
	Omak	1.35	.49	17	1.30	.47	30
Liter	Yes	0.89	.67	70	0.96	.64	49
	No	1.22	.55	92	1.24	.51	107
Lang	Indian	1.26	.47	92	--	--	-
	Salishan	0.83	.41	6	--	--	-
	English	0.96	.67	98	--	--	-
Ibld	Mixed	0.97	.69	59	0.83	.54	48
	Full	1.17	.53	142	1.18	.52	204

Table X. Marriages per Person, 1910
COLVILLE

B. CREEK

Table XI indicates that the average age at first marriage among the Creeks remained fairly constant for both men and women between 1900 and 1910. These numbers do not appear to mask great internal variation, although Muskogee County stands out with an average age at first marriage that is more than one year higher than for surrounding areas. This is the site of the Creek Agency and a major commercial center at this time. Muskogee County also contains most of the Creek Freedmen and the highest white population prior to 1906. The fact that the "Other" occupational category stands apart as well is intriguing, but not very helpful.

Relative homogeneity is also visible in the evidence gathered regarding the age differences between spouses (Table XII). Muskogee County again stands out with a mean difference of more than nine years between spouses at marriage ("other" also leads the occupational subgroups with a difference of nearly ten years). Also notable is that Creeks living on their allotments ("RES") appear to have chosen spouses of markedly different ages than those not living on their assigned lands.

Statistics describing marital status of Creeks in 1900 and 1910, summarized in Table XIII, offer some additional hints as to the causes of variation in marriage behavior. First, subgroups defined by degree of blood revealed small, but significant

YEAR	VAR	VALUE	SEX	MEAN	STD	N
1900	ALL		Men	22.5	3.6	401
			Women	19.3	4.3	643
	Twn	Wagoner Co.	Women	19.70	3.63	76
		Tulsa Co.		19.77	5.89	22
		Creek Co.		18.84	4.24	116
		Okmulgee Co.		19.60	3.87	72
		Muskogee Co.		20.83	4.51	18
		McIntosh Co.		18.97	3.30	125
		Okfuskee Co.		19.63	4.02	133
		Hughes		18.95	3.87	81
	Occ	Farmer	Men	22.53	3.56	236
		Farm Worker		21.93	3.53	84
		Professional		21.53	3.84	17
		Other		23.84	4.24	19
	Tribe	Creek		22.77	3.66	328
		Muskogee		21.49	3.41	45
		Seminole		22.08	2.72	13
		Yuchi		21.22	3.19	18
1910	ALL		Men	22.6	3.7	173
			Women	19.9	3.8	236

Table XI. Marriage Age
CREEK

differences in both censuses. That is "mixed" and "fullblood" Creek populations in those years appear to have been comprised of relatively equal proportions of single, widowed and married people. Second, the relative homogeneity apparent in earlier measures seems to have held here as well. Among males in counties with at least 100 subjects, for example, the percentage of individuals reported as "single" varied a total of 13 percentage points. Third, however, among the two largest occupational categories, farmer/rancher and farm worker, a sharp pattern emerged. "Farmers" were overwhelmingly married and "farm workers" were overwhelmingly single in both the 1900 and 1910 returns. And finally, in 1900, subgroups defined by education or

YEAR	VAR	VALUE	MEAN	STD	N
1900	Twn	Wagoner Co.	7.91	8.00	185
		Tulsa Co.	5.35	5.08	59
		Creek Co.	5.99	9.72	325
		Okmulgee Co.	6.09	8.62	207
		Muskogee Co.	9.33	8.89	43
		McIntosh Co.	6.37	9.33	404
		Okfuskee Co.	5.48	8.83	382
		Hughes Co.	4.79	7.83	249
	Occ	Farmer/Rancher	6.28	9.19	594
		Farm Worker	3.56	6.64	98
		Professional	5.22	9.28	58
		Labor/Service	5.14	5.81	21
		Other	9.92	9.68	39
	Liter	No (Men)	6.65	9.61	451
		No (Women)	5.62	9.38	564
		Yes (Men)	5.43	7.80	416
		Yes (Women)	6.81	7.79	408
	Wbld	None	5.63	8.86	623
		Mixed	7.08	8.53	239
	ALL		6.0	8.8	1851
1910	Occ	None	7.58	8.61	50
		Farmer/Rancher	5.25	7.86	237
		Other	4.49	2.03	46
	Res	Yes	6.54	8.81	160
		No	3.16	6.83	101
	ALL		5.4	8.3	649

Table XII. Age Differences
CREEK

literacy in English or Muskogee (SPK=yes, SCH=yes, LITER=yes) showed a greater tendency to singlehood than those who responded "no" to these inquiries.

Understanding these variations will require additional analysis, but the census figures remind us that farming was a family enterprise that clearly encouraged marriage. Also, both wage labor and literacy were characteristic of a younger, more independent population. This observation regarding the reality

YEAR	VAR	VALUES	MAR	WID	SING	N
1900	Sex	Males	28.4	3.3	67.9	3027
		Females	33.1	8.7	57.8	3065
	County	Wagoner (m)	28.3	1.9	69.8	106
		(f)	52.6	4.4	42.1	114
		Tulsa (m)	24.4	2.4	73.2	41
		(f)	56.6	3.3	40.0	30
		Creek (m)	31.0	1.0	68.0	103
		(f)	61.5	2.3	35.4	130
		Okmulgee (m)	34.1	3.7	70.1	134
		(f)	43.8	4.2	50.0	144
		Muskogee (m)	14.3	0.0	85.7	21
		(f)	44.4	0.0	55.6	27
		McIntosh (m)	23.2	1.3	75.4	224
		(f)	44.7	2.7	52.7	226
		Okfuskee (m)	37.7	0.5	60.7	196
		(f)	54.8	9.6	34.0	188
		Hughes (m)	37.8	0.9	61.3	111
		(f)	56.3	2.5	40.3	119
	Occ	None (m)	0.0	0.0	100.0	114
		(f)	0.0	0.0	100.0	113
		Farm/Rancher (m)	74.7	1.0	24.4	201
		(f)	28.6	42.9	28.6	7
		Farm Worker (m)	17.5	1.3	80.7	399
		(f)	6.7	6.7	86.7	15
		Nat. Trades (m)	0.0	0.0	100.0	1
		U.S. Govt. (m)	0.0	50.0	50.0	2
		Professional (m)	72.2	0.0	27.8	18
		(f)	0.0	11.1	88.9	9
		Labor/Serv (m)	18.8	5.8	75.4	69
		(f)	18.4	18.4	57.1	49
		Skilled Lab (m)	71.4	14.3	14.3	7
		(f)	33.3	0.0	66.7	3
		Mercantile (m)	33.3	0.0	66.7	18
		(f)	0.0	0.0	100.0	2
	Spk	Yes (m)	27.6	2.0	70.4	635
		(f)	49.0	3.0	47.2	629
		No (m)	34.5	0.3	64.5	293
		(f)	55.7	6.3	36.9	336
	Sch	Yes (m)	0.0	0.0	100.0	124
		(f)	0.0	0.0	100.0	118
		No (m)	6.3	0.7	93.1	144
		(f)	29.3	1.8	68.3	167
	Liter	Yes (f)	47.3	2.7	49.1	562
		No (f)	56.8	6.2	36.0	403
	Tribe	Creek (m)	28.3	1.6	70.0	857
		(f)	50.0	4.1	45.1	878
		Muskogee (m)	45.6	0.0	53.2	79
		(f)	64.0	6.0	28.0	100
	Wbld	None (m)	30.5	0.8	68.1	634
		(f)	53.0	5.3	40.8	681
		Mix (m)	28.4	0.8	69.2	299
		(f)	47.9	2.1	49.0	290

YEAR	VAR	VALUES	MAR	WID	SING	N
1910	Sex	Males	34.9	1.5	63.2	326
		Females	58.6	4.1	36.0	314
	Occ	None (m)	13.9	3.8	82.3	79
		(f)	57.8	4.0	37.6	173
		Farmer (m)	73.5	0.0	26.4	102
		Farm Worker (m)	13.6	2.7	82.4	74
		(f)	72.7	0.0	18.2	11
		Professional(m)	60.0	0.0	40.0	5
		(f)	0.0	0.0	100.0	6
		Labor/Serv. (m)	21.4	0.0	78.6	14
		(f)	44.0	16.0	36.0	25
		Skilled Lab.(m)	33.0	0.0	66.7	3
		(f)	66.7	0.0	0.0	3
		Mercantile (m)	80.0	0.0	20.0	5
		(f)	50.0	0.0	50.0	2
	Liter	Yes (m)	34.7	0.4	63.8	243
		No (m)	32.9	5.5	61.6	73
	Empsta	Employer (m)	76.0	4.0	20.0	25
		Self-Employed(m)	92.8	0.0	7.2	69
		Employee (m)	12.0	0.9	86.1	108
	Res	Yes (m)	59.7	1.6	38.7	62
		No (m)	36.9	1.9	60.2	103
	Wbld	None (f)	55.9	6.0	37.0	184
		Mixed (f)	56.2	1.6	42.2	64

Table XIII. Marital Status 15-29 Year Olds (Percentages)
CREEK

of Creek farming seems to be confirmed by the fact that "farmers" recorded the highest mean number of marriages per person (1.39) among the occupational groups responding to the 1910 census (see Table XV) and a higher-than-average age difference between spouses in 1900.

The single temporal observation to be made about Creek marital status is that the 1910 population showed a sharply smaller number of single women (36% in that census as opposed to nearly 58% in 1900). The reasons for this are not clear, however, for they could reflect a shifting age structure, a

feature of our sampling technique for 1910 or some other social or occupational factor.

Finally, measures of tribal exogamy summarized in Table XIV reveal an area where differences within the Creek community could be readily observed. The overall rate of tribal exogamy remained about the same between 1900 and 1910, but the census data reveal a marked shift in rates of particular subgroups. Not surprisingly, both censuses indicate that exogamy was highest for the children of exogamous parents (PEXOG); more than 30 percentage points separate rates for people whose parents married out of the tribe and those whose parents were married to Creeks. In addition, extremely high rates were recorded for people who were literate, and of mixed ancestry (another obvious indication of exogamy in previous generations!). The lowest rates of exogamy among major subgroups was recorded among those who were not literate in English (only 9% of the 454 women who spoke only Creek married outside the tribe) and were of purely Indian ancestry. Of the counties recorded in 1900, Okfuskee stood out with the lowest rates of exogamy (m: 9.6; f:12.8), while Muskogee (with only 43 respondents) and Tulsa (with 72) had the highest.

It appears that the educational and racial tendencies recorded in the 1900 census became more pronounced in 1910. In the later census, the rate of exogamy among "mixed-race" males rose from 42.4 to 50.5 percent, while the same rate among females listed as "fullblood" dropped from 21.2% to 10.4%. Similarly, the rate of exogamy among literate males rose 14 percent but dropped

YEAR	VAR	VALUE	SX	%EXOG	N
1900	ALL		M	22.9	914
			F	31.3	1029
	Twn	Wagoner Co.	M	27.3	99
			F	31.4	105
		Tulsa Co.	M	36.4	33
			F	46.2	39
		Creek Co.	M	20.7	174
			F	29.7	195
		Okmulgee Co.	M	31.7	101
			F	40.0	115
		Muskogee Co.	M	72.2	18
			F	76.6	25
		McIntosh Co.	M	27.6	181
			F	42.0	226
		Okfuskee Co.	M	9.6	187
			F	12.8	195
		Hughes Co.	M	17.4	121
			F	21.7	129
	Occ	None	M	40.0	5
		Farmer/Rancher		23.2	626
		Farm Worker		12.5	104
		Native Govt.		0.0	3
		Native Trades		0.0	4
		U.S. Government		16.7	6
		Professional		23.0	61
		Labor/Service		34.8	23
		Skilled Labor		54.5	11
		Mercantile		64.3	14
	Spk	Yes	M	32.7	526
			F	49.1	560
		No	M	9.6	386
			F	9.0	454
	Liter	Yes	M	32.4	426
			F	50.5	414
		No	M	14.6	485
			F	17.8	600
	Tribe	Creek	M	21.4	723
			F	31.9	836
		Muskogee	M	21.5	107
			F	28.3	120
		Yuchi	M	23.4	64
			F	5.9	51
		Seminole	M	80.0	20
			F	81.8	22
	Wbld	None	M	16.00	661
			F	21.2	758
		Mixed	M	42.4	243
			F	60.8	263
	Bbld	None	F	30.9	974
		Mixed		40.0	45
	Pexog	Yes	M	51.1	133
			F	69.4	170
		No	M	15.0	739
			F	19.4	793

YEAR	VAR	VALUE	SX	%EXOG	N
1910	ALL		M	29.7	330
			F	28.1	327
	Twn	Bearden	A	7.5	80
		Boley-Aden	A	70.6	34
		Castle-Okemah	A	25.0	80
		Okfuskee-Creek	A	50.0	28
		Weleetka	A	5.3	38
		Okmulgee	A	68.2	44
		Beggs	A	33.3	24
		Bryan	A	0.0	16
		Natura	A	42.1	37
		Hamilton	A	15.4	53
		Henry	A	34.8	46
		Morris	A	50.0	27
		Pascoe	A	21.4	28
		Tiger	A	41.2	32
		Schulter	A	20.8	48
		Shiner	A	19.0	42
	Occ	None	M	8.5	47
		Farmer/Rancher	M	34.0	203
		Farm Worker	M	9.1	11
		Native	M	0.0	3
		Government			
		U.S. Government	M	100	1
		Professional	M	27.3	11
		Labor/Service	M	33.3	3
		Skilled Labor	M	75.0	8
		Mercantile	M	84.6	13
	Liter	Yes	M	42.3	208
			F	46.4	168
		No	M	8.2	110
			F	9.2	142
	Lang	English	M	42.2	108
			F	46.6	174
		Creek	M	3.7	218
			F	7.4	149
	Empsta	Employer	M	52.9	51
		Self-Employed	M	32.2	174
		Employee	M	34.6	26
	Res	Yes	F	42.7	
		No		22.8	
	Ibld	Mixed	M	50.5	91
			F	58.5	82
		Full	M	6.5	199
	Pexog	Yes	F	10.4	222
			M	75.0	44
			F	76.7	43
		No	M	22.8	285
			F	20.5	283

Table XIV. Exogamy
CREEK

among illiterate females by more than 8 percent.

Table XV presents again a picture of relative homogeneity among the Creeks. While differences are evident within groups, they appear neither significant nor attributable to factors other than age and other structural factors. (It is intriguing that the lowest figure in the sample is the rate for people whose parents were exogamous, but this is probably attributable to a relatively young group rather than to some cultural difference among exogamous couples that reduced the number of times they married.)

The Creek marriage profile is clearly more complex than this level of analysis can understand, but it does offer at least the outlines of a distinctive, tribal pattern. In their marriage behavior, Creeks varied relatively little among themselves and between the two censuses. They married at about the same age, to people of a relatively constant age difference and the population seems to have been divided among relatively stable populations of single and married individuals. On the other hand, the players in the Creek marriage game were shifting rapidly during the period covered by these two censuses. Not only was the community divided sharply between those who married "in" and those who married "out," but these divisions appeared to be growing during the first decade of the century. By 1910 it was not clear that the high rates of exogamy among some groups would produce different behaviors, but it would seem at least that there was potential for deep divisions in future marriage practices.

VAR	VALUE	MALES			FEMALES		
		MEAN	STD	N	MEAN	STD	N
All		1.19	.82	242	1.14	.72	245
Twn	Bearden	1.49	.71	41	1.31	.47	39
	Boley-Paden	1.20	.77	15	1.40	.51	15
	Castle-Okemah	1.20	.85	51	1.17	.76	66
	Okfuskee	0.67	.54	33	0.85	1.13	27
	Weleetka	1.38	1.10	34	1.35	.79	37
	Okmulgee	1.27	.47	11	1.22	.43	18
	Beggs	1.25	.77	16	1.00	.43	12
	Bryan	1.20	.79	10	0.75	.71	8
	Natura	1.03	.71	31	0.78	.42	23
Occ	None	0.73	1.04	139	0.93	.74	280
	Farmer/Rancher	1.39	.71	207	2.10	1.20	10
	Farm Worker	0.77	.57	30	1.20	.42	10
	Native Government	1.33	.58	3	--	--	-
	U.S. Government	1.00	0.00	2	--	--	-
	Professional	1.36	.67	11	2.00	--	1
	Labor/Service	1.00	0.00	7	1.38	.88	
	Skilled Labor	1.27	.47	11	--	--	-
	Mercantile	1.23	.60	13	--	--	-
Empsta	Employer	1.27	.63	51	2.00	.63	6
	Self-Employed	1.35	.63	185	1.82	1.17	11
	Employee	0.98	.67	48	1.13	.34	16
Liter	Yes	1.14	.69	259	1.11	.61	204
	No	1.38	.96	144	1.32	.70	193
Ibld	Full	1.21	.90	262	1.21	.74	286
	Mixed	0.92	.86	146	0.84	.75	141
Res	Yes	1.36	.90	193	--	--	-
	No	0.90	.77	157	--	--	-
Farm	Yes	--	--	-	1.81	1.05	16
	No	--	--	-	1.26	.62	23
Lang	English	--	--	-	1.13	.64	227
	Creek	--	--	-	1.32	.71	186
Exog	Yes	1.22	.41	65	--	--	-
	No	1.49	.76	218	--	--	-
Pexog	Yes	0.71	.75	82	0.68	.66	77
	No	1.20	.89	336	1.17	.76	352
Genex	None	1.49	.74	208	--	--	-
	One	1.29	.60	42	--	--	-
	Two	1.16	.37	32	--	--	-

Table XV. Marriages per Person, 1910
CREEKS

C. CROW

The mean age at marriage for Crow men summarized in Table XVI dropped by three years between 1886 and 1900, but then returned to its previous level in 1910 and 1930. This variation could well be related to the skewed age structure within the tribe in 1900 and 1910 when the age cohorts between 15 and 30 years of age were among the smallest in the community. At a time of population crisis (overall population dropped nearly 25% from 1885 to 1900 and another 2% between 1900 and 1910) people may well have shifted from their customary practices and married earlier. It is worth noting, for example, that in 1900, 16.4% of Crow women between the ages of 15 and 29 were reported as widows. (This guess is also supported by the reduction in the age differences between spouses reported in 1900 and afterwards, see Table XVII.) When population began to rise again as it had by 1930, there may have been a return to earlier patterns.

The subgroups reported in 1910 suggest an additional factor for shifts in marriage customs: for women, all subgroups defined by education in English (SCH, SPK and LITER) reported drastically lower ages at first marriage and higher age differences between them and their spouses. This pattern is also evident in 1910. Thus, it would seem that in a rapidly shifting demographic and social climate, older patterns were being abandoned; men and women married earlier and educated women chose (or were chosen

YEAR	VAR	VALUE	SEX	MEAN	STD	N
1886	ALL		Men	23.2	4.2	87
			Women	19.4	4.0	155
1900	ALL		Men	20.2	9.6	184
			Women	18.4	4.8	214
	Sch	Yes	Women	16.87	3.28	69
		No		19.15	5.31	139
	Liter	Yes		16.74	3.25	73
		No		19.30	5.30	138
	Spk	Yes		16.77	3.22	77
		No		19.32	5.35	135
1910	ALL		Men	22.3	3.9	102
			Women	17.6	4.7	142
	Wbld	None		17.16	4.60	116
		Mixed		19.20	3.57	25
1930	ALL		Men	22.5	3.6	103
			Women	19.9	3.8	132

Table XVI. Marriage Age
CROW

by) partners who were far older than had been customary in the past.

The social upheavals at Crow Agency seem also to be reflected in the statistics regarding marital status. The percentage of men and women who were married in the community rose between 1885 and 1900 (and continued to rise for women in 1910), before dropping to approximately 1885 levels in 1930. With population dropping as fast as it was in the last decade of the nineteenth century, it does not seem surprising to observe a greater tendency to marry among community members. As was true among the Creeks, ranchers displayed consistently high rates of marriage; rates among other occupational groups were not as distinctive. The impact of social factors was also underscored by the fact that, with one exception, the array of marital status

YEAR	VAR	VALUE	MEAN	STD	N
1885	ALL		4.1	6.0	888
1900	Occ	None	4.47	8.04	68
		Farmer	2.66	6.87	371
		Other	1.62	7.94	24
	Rat	Yes	2.45	7.03	386
		No	4.56	7.63	79
	Liter	No	2.29	7.50	406
		Yes	6.04	4.40	71
	Spk	Yes (Men)	.80	5.99	59
		Yes (Women)	5.83	4.36	77
		No (Men)	3.08	7.29	404
		No (Women)	2.27	7.53	401
	ALL		2.9	7.2	938
1910	Grad	No	1.30	7.53	302
		Yes	6.18	6.91	113
	Liter	No	1.37	7.55	256
		Yes	5.88	6.81	110
	Res	Yes	2.36	7.84	327
		No	4.57	6.76	125
	ALL		2.6	7.7	824
1930	ALL		2.6	7.3	616

Table XVII. Age Differences
CROW

among subpopulations divided by blood quantum varied relatively little. The exception was "mixed blood" women in 1910 and women with less than 25% Indian ancestry in 1930. Both groups were overwhelmingly single (61% and 83%), but this statistic may well be a reflection of the group's young age rather than of social choice. Mixed blood men did not differ so markedly from the tribal means.

Exogamy, reported for the Crows in Table XIX, was lower than in many other tribes. Overall rates for the tribe never exceeded 5% in the 1900 and 1910 censuses. As was true among the Creeks, however, exogamy varied considerably within the community and appears to have been influenced primarily by both formal

schooling and family history. Exogamy rates for literate, schooled and English speaking Crows were three to four times what they were for those who did not fit those categories. Interestingly, however, these rates seem to have dropped between 1900 and 1910. It would seem possible to suppose that as demographic pressures eased, tribal members returned to their preference for marriage partners from within the community. Children of exogamous parents, however, were consistently more likely to marry outside the tribe than were those whose ancestry was solely Crow.

YEAR	VAR	VALUES	MAR	WID	SING	N
1885	Sex	Males	32.8	0.6	66.6	326
		Females	48.5	6.1	45.4	295
1900	Sex	Males	54.0	8.4	37.6	872
		Females	53.7	16.4	29.9	896
	Rat	Yes (m)	63.6	3.9	32.6	129
		No (m)	15.4	7.7	76.9	52
	Occ	None (m)	8.3	8.3	83.3	48
		Farm/Rancher(m)	71.0	4.7	24.3	107
		Farm Worker (m)	100.0	0.0	0.0	1
		U.S. Govt. (m)	83.3	0.0	16.7	6
		Labor/Serv. (m)	80.0	0.0	20.0	5
	Liter	Yes (m)	30.9	3.6	65.5	110
		(f)	79.3	1.3	19.0	79
		No (m)	78.9	7.0	14.1	71
		(f)	88.3	7.8	3.9	77
	Spk	Yes (m)	32.1	3.6	64.3	112
		(f)	80.7	1.2	18.1	83
		No (m)	78.0	7.4	14.7	68
		(f)	87.7	8.2	4.1	73
	Sch	Yes (m)	32.1	3.8	64.2	106
		(f)	81.3	1.3	17.3	75
		No (m)	76.8	7.2	15.9	69
		(f)	88.2	7.9	3.9	76
	Dwltp	Fixed (m)	63.7	4.0	32.3	124
		Movable (m)	17.9	7.1	75.0	56

Table XVIII. Marital Status 15-29 Year Olds (Percentages)
CROW

YEAR	VAR	VALUES	MAR	WID	SING	N
1910	Sex	Males	41.3	5.3	53.4	988
		Females	62.1	3.0	34.8	979
	Occ	None (m)	3.1	3.1	93.8	32
		(f)	40.9	3.0	56.1	66
		Farm/Ranch (m)	79.2	7.7	23.1	52
		(f)	0.0	0.0	100.0	2
		Farm Worker (m)	20.0	0.0	80.0	5
		(f)	100.0	0.0	0.0	1
		U.S. Govt. (m)	50.0	0.0	50.0	2
		Professional(m)	33.3	0.0	66.7	3
		(f)	50.0	0.0	50.0	2
		Labor/Serv. (m)	36.1	3.0	60.6	33
		(f)	89.9	3.4	6.8	59
		Skilled Lab.(m)	50.0	16.7	33.3	6
		(f)	0.0	0.0	100.0	2
	Sch	Yes (m)	2.2	0.0	97.8	45
		(f)	3.3	0.0	96.7	90
		No (m)	50.0	0.0	50.0	12
		(f)	63.6	0.0	36.4	22
	Liter	Yes (f)	55.7	1.3	43.0	149
		No (f)	71.4	14.3	14.3	14
	Empsta	Employer (m)	100.0	0.0	0.0	2
		Self-Employed(m)	78.0	2.4	19.5	41
		Employee (m)	37.3	7.8	54.9	51
		Aboriginal(m)	47.1	17.6	35.3	17
	Dwltp	Modern (m)	39.8	0.9	59.3	113
		Ibld				
	Ibld	Mixed (m)	38.5	2.6	59.0	39
		(f)	36.1	2.8	61.1	39
		Full (m)	32.4	4.9	62.7	142
		(f)	62.3	2.2	35.5	138
	Pexog	Yes (m)	42.1	2.6	55.3	38
		(f)	39.4	3.0	57.6	33
		No (m)	31.5	4.9	63.6	143
		(f)	60.8	2.1	37.1	143
1930	Sex	Males	35.9	5.3	58.8	988
		Females	39.9	5.5	54.5	979
	Atjur	Yes (m)	41.5	1.6	57.0	193
		(f)	51.3	4.6	43.9	196
		No (m)	12.9	0.0	87.1	31
		(f)	59.0	2.6	38.5	39
	Ibld	<1/4 (m)	0.0	0.0	100.0	14
		(f)	16.7	0.0	83.3	18
		1/4+ (m)	31.7	1.0	67.3	104
		(f)	59.0	1.7	39.3	117
		Full (m)	48.1	1.9	50.0	106
		(f)	52.0	8.0	40.0	100

Table XVIII. Marital Status 15-29 Year Olds (Percentages)
CROW

YEAR	VAR	VALUE	SX	%EXOG	N
1900	ALL		M	2.4	462
			F	4.8	477
	Occ	None	F	2.2	227
		Farmer		70.0	10
	Sch	Yes	M	13.3	113
			F	13.3	113
		No	M	2.2	814
			F	2.2	814
	Liter	Yes	F	18.1	72
		No		2.5	402
	Spk	Yes	F	16.7	78
		No		2.5	397
	Rat	Yes	F	7.3	248
		No		2.2	229
	Dwltp	Fixed	M	1.9	426
			F	7.6	249
		Movable	M	8.8	34
			F	1.8	228
	Wbld	None	F	3.7	462
		Mixed		40.0	15
	Pexog	Yes	F	37.5	16
		No	F	3.5	460
1910	ALL		M	3.6	412
			F	3.6	412
	Liter	Yes	M	7.8	103
		No		2.5	283
	Lang	English	M	7.4	108
			F	5.8	121
		Crow	M	2.3	301
			F	2.1	285
	Ibld	Mixed	M	15.2	33
			F	13.6	22
		Full	M	2.4	376
			F	3.1	387

Table XIX. Exogamy
CROW

Finally, the numbers of marriages per person, reported in 1910 and summarized in Table XX, suggests another way in which traditional Crow practices persisted in the modern era. First, the rate of marriage was high; on average Crows married nearly three times each in an age when divorces were difficult to obtain

VAR	VALUE	MALES			FEMALES		
		MEAN	STD	N	MEAN	STD	N
All		2.86	2.08	407	2.28	1.53	432
Occ	None	3.96	2.48	49			
	Farmer	2.73	2.00	229			
	Farm Worker	3.57	2.64	7			
	Native Trades	8.00	--	1			
	U.S. Government	2.30	1.61	23			
	Professional	1.00	--	1			
	Labor/Service	2.34	1.66	59			
	Skilled Labor	2.00	1.05	10			
	Mercantile	1.00	--	1			
	Employer	1.75	.50	4			
Empsta	Self-Employed	2.80	1.04	209			
	Employee	2.33	1.67	103			
Grad	Yes	1.79	1.32	117	1.36	.72	119
	No	3.29	2.18	290	2.63	1.62	313
Liter	Yes	1.82	1.42	125	1.44	.92	119
	No	3.30	2.18	263	2.61	1.58	270
Ibld	Mixed	1.66	.91	41	1.54	.99	37
	Full	2.99	2.13	363	2.34	1.55	387
Pexog	Yes	1.71	.98	49	1.55	.96	40
	No	3.03	2.15	357	2.34	1.55	387

Table XX. Marriages per Person, 1910
CROW

in mainstream society. Among Crows who had not graduated from school and were not literate, however, this rate was nearly twice as high. Similarly, the marriage rate for "full blood" Crows was 80% higher than it was for "mixed bloods." (2.99 vs. 1.66). In the nineteenth century, Crows changed partners several times during their lives. Both men and women had the right to renounce their spouses. This practice was frowned upon by missionaries and government agents, but there is evidence that it continued. These figures support that observation, as the tribal members least associated with outsiders had the highest rates of marriage.

The greatest impact on marriage practice on the Crow reservation seems to have been the demographic decline of 1885 to 1900. In this atmosphere, older patterns of relatively high marriage ages and low exogamy were relaxed as people cast a wider net for marriage partners. In 1930, with the population stabilized, age at first marriage had risen to earlier levels and the marital status of tribal members had shifted so that a smaller percentage of the community was married. The one sector of the population that did not appear to shift back to traditional patterns, however, was educated, mixed-blood women. This group married less frequently, married later and frequently married outsiders. It is possible that schooling, and perhaps parental exogamy, brought Crows into greater contact with outsiders, contributing to greater exogamy. These tables suggest that at Crow educated, mixed-blood women represented a different pattern of marriage that began to appear in 1910 and, presumably, afterward.

D. HOPÍ

Among the Hopi, men's mean age at marriage declined between 1885 and 1900 and then rose slowly over the next two censuses, reaching its original level in 1930. Women's age at marriage increased steadily until 1910, after which it declined slightly. Unlike the men's age measure, women did not return to the 1885 "norm," but ended the period under study with a higher age at first marriage than they had at the start (19.5 years vs. 17.5 years). Table XXI reveals that variation in marriage age among the various Hopi towns is evident, but all seem to follow the general trend of a decline to 1910 followed by a rise. It is difficult to evaluate the apparent differences between the Hopi towns.

The pattern of moving away from a "traditional" pattern and then moving back towards it again, observed at Crow and among Hopi men, is also evident in the measure of age differences at Hopi. These data are summarized in Table XXII. The mean age difference at marriage dropped in 1900 and 1910 and rose again in 1930, marking the apparent return to an older pattern. Internal variation in this measure was most striking for 1910 when the age differences for married men (4.8 years) was nearly three times what it was for women (1.7 years). Perhaps women did not return to earlier patterns as readily as men, a surprising fact (if it is true) for so matrilocal a society. The variations noted above

YEAR	VAR	VALUE	SEX	MEAN	STD	N
1885	ALL		Men	22.1	3.6	56
			Women	17.5	3.0	75
1900	ALL		Men	20.3	3.3	183
			Women	18.6	3.8	211
	Twn	Shingwopavi	Men	22.83	2.36	18
			Women	22.71	4.21	24
		Shipaulovi	Men	21.88	3.40	8
			Women	19.60	3.37	10
		Mesongnovi	Men	22.23	3.24	13
			Women	20.67	4.27	12
		Oraibi	Men	19.04	2.36	94
			Women	17.23	1.98	104
		First Mesa	Men	20.86	4.07	50
			Women	18.77	4.70	61
	Farm	Yes	Men	20.82	3.62	74
		No		19.45	2.81	73
1910	ALL		Men	21.4	3.8	33
			Women	20.2	4.7	57
	Town	Sichumovi	Men	21.67	2.60	9
			Women	19.75	3.45	16
		Shipaulovi	Men	20.80	3.27	5
			Women	17.00	2.56	8
		Shimopovi	Men	19.25	3.20	4
			Women	21.92	6.49	12
		Walpi	Men	17.00	2.00	3
			Women	18.75	4.11	4
		Meshongnovi	Men	22.00	1.41	2
			Women	20.75	3.77	4
		Tewa	Women	22.00	--	1
		Oraibi	Men	23.13	5.33	8
			Women	20.50	5.36	10
		Pacabi	Men	24.50	0.71	2
			Women	24.50	0.71	2
1930	ALL		Men	22.7	3.1	104
			Women	19.5	3.3	150
	Subgrp	Tewa	Men	23.19	3.33	21
			Women	20.91	3.66	22
		Sichumnovi	Men	21.76	2.70	17
			Women	18.91	3.05	22
		Walpi	Men	24.86	2.79	7
			Women	20.00	2.06	9
		Schipaulovi	Men	24.67	1.21	6
			Women	18.56	3.36	9
		Meshongnovi	Men	20.88	2.80	8
			Women	19.40	3.27	15
		Shimopovi	Men	21.79	3.24	14
			Women	18.95	3.44	20
		Oraibi	Men	22.19	2.46	16
			Women	19.39	3.54	28
		Bacabi	Men	24.25	2.50	4
			Women	22.40	2.51	4
		Hotevilla	Men	22.65	3.50	14
			Women	19.23	2.72	22

Table XXI. Marriage Age
HOPI

YEAR	VAR	VALUE	MEAN	STD	N
1885	ALL		5.4	6.0	888
1900	Town	Shingwopavi	1.86	2.92	49
		Shipaulovi	2.25	3.94	24
		Mesongnavi	1.38	2.22	39
		Oraibi	1.89	2.23	151
		First Mesa	2.87	3.02	122
	Farm	Yes	2.31	2.83	217
		No	1.61	1.97	118
	ALL		2.2	2.8	770
1910	Twn	Sichumovi	3.37	5.27	43
		Shipaulovi	2.00	2.62	22
		Shimopovi	3.06	5.37	52
		Walpi	1.62	2.48	37
		Meshongnovi	2.10	4.41	41
		Tewa	1.91	4.06	33
		Oraibi	13.71	17.46	70
		Bacabi	.77	1.77	22
	ALL	Male	4.8	10.1	320
		Female	1.7	4.1	318
1930	Subgrp	Tewa	4.34	5.08	53
		Sichumovi	4.06	3.80	50
		Walpi	4.76	5.76	34
		Shipaulovi	3.43	6.08	23
		Meshongnovi	4.39	8.73	41
		Shimopovi	4.91	7.73	56
		Oraibi	3.64	6.37	72
		Bacabi	1.19	3.20	26
		Hotevilla	3.36	4.52	75
	ALL		4.8	7.7	575

Table XXII. Age Differences
HOPI

would seem related to population loss and resulting shifts in the tribal age structure. As the population shrank, fewer marriage partners were available and there were fewer reasons to follow customary patterns. Population loss must have also been a factor in the observable changes in marital status. In 1900, the overall number of married women in the community dropped by 7%, and in 1910, this same measure for married men dropped by more than 10%. Men rebounded to 1885 levels in 1930 but women did not.

YEAR	VAR	VALUES	MAR	WID	SING	N
1885	Sex	Males	39.1	1.7	59.2	603
		Females	49.3	4.1	46.6	485
1900	Sex	Males	38.2	10.9	49.6	1024
		Females	42.0	8.1	48.6	935
	Tw	Shingwopavi (m)	50.0	7.7	38.5	26
		(f)	73.7	0.0	21.1	19
		Shipaulovi (m)	38.5	2.7	46.2	13
		(f)	72.7	9.1	18.2	11
		Meshongnovi (m)	41.7	8.3	50.0	24
		(f)	52.6	10.5	26.3	19
		Oraibi (m)	57.5	3.4	34.5	87
		(f)	79.8	1.1	17.0	94
		First Mesa (m)	58.8	17.6	23.5	51
		(f)	84.9	9.4	5.7	53
	Occ	None (m)	0.0	0.0	100.0	19
		Farm/Ranch (m)	84.5	7.3	7.3	110
		Farm Worker (m)	23.1	19.2	50.0	26
		U.S. Govt. (m)	75.0	25.0	0.0	4
		Skilled Labor	100.0	0.0	0.0	1
	Liter	Yes (m)	40.7	8.5	50.8	59
		No (m)	60.4	7.9	28.1	139
	Spk	Yes (m)	44.9	8.7	46.4	69
		(f)	61.6	10.3	23.1	39
		No (m)	59.7	7.8	28.7	129
		(f)	81.3	3.3	13.3	150

Table XXIII. Marital Status 15-29 Year Olds (Percentage)
HOPI

We suspect the low number of widows reported in 1910 is an error, and our age pyramid shows the cohorts under 15 were far larger than those over 15. Lots of children, lots of elderly, relatively few opportunities to marry.

Among the subgroups appearing in Table XXIII, it is notable that those listed as farmers, native tradesmen or government employees were overwhelmingly "married," as were those who were not literate in English. It is very difficult to understand the differences between village populations without population pyramids for each. Those with high percentages of married people

YEAR	VAR	VALUES	MAR	WID	SING	N
1910	Sex	Males	24.7	1.1	68.4	1294
		Females	38.1	3.6	58.3	1175
	Twn	Sichumovi (m)	38.9	0.0	61.1	18
		(f)	50.0	5.0	40.0	20
		Shipaulovi (m)	27.3	0.0	63.6	11
		(f)	41.6	0.0	25.0	12
		Shimopovi (m)	25.0	0.0	70.0	20
		(f)	50.0	0.0	28.6	14
		Walpi (m)	15.8	5.3	68.4	19
		(f)	33.3	0.0	58.3	12
		Meshongnovi (m)	3.7	0.0	77.8	27
		(f)	11.8	0.0	64.7	17
		Tewa (m)	28.6	0.0	71.4	21
		(f)	47.4	0.0	36.8	19
		Oraibi (m)	17.9	3.6	75.0	28
		(f)	29.6	0.0	70.4	27
		Pacabi (m)	18.2	0.0	81.8	11
		(f)	14.3	0.0	85.7	7
		Moencapi (m)	57.9	0.0	42.1	19
		(f)	62.5	0.0	37.5	24
	Occ	None (m)	8.4	1.0	85.4	96
		(f)	26.5	1.2	57.8	83
		Farm/Rancher(m)	72.4	0.0	27.6	29
		(f)	61.9	0.0	38.1	21
		Farm Worker (m)	20.6	2.9	64.7	34
		Nat. Trades (m)	50.0	0.0	50.0	2
		(f)	70.9	0.0	19.4	31
		U.S. Govt. (m)	100.0	0.0	0.0	1
		(f)	0.0	0.0	100.0	2
		Labor/Serv. (f)	0.0	0.0	80.0	5
		Skilled Lab.(m)	50.0	0.0	50.0	2
		(f)	100.0	0.0	0.0	1
		Mercantile (m)	33.3	0.0	66.7	3
	Empsta	SelfEmployed(m)	52.6	0.0	43.9	57
		Employee (m)	13.3	6.7	73.3	15
	Liter	Yes (m)	20.1	0.7	76.3	139
		(f)	33.6	0.0	58.8	119
		No (m)	44.1	2.9	38.2	34
		(f)	65.6	3.1	9.4	32
	Lang	Hopi (m)	36.7	3.3	43.3	30
		(f)	66.7	3.0	9.1	33
		English (m)	22.5	0.7	73.9	142
		(f)	33.0	0.0	59.3	118
1930	Sex	Males	36.0	7.2	56.7	1294
		Females	38.1	3.6	58.3	1175
	Atjur	1 (m)	30.7	1.6	67.7	189
		(f)	58.0	0.5	41.5	200
		2 (m)	25.0	0.0	75.0	24
		(f)	60.0	0.0	40.0	10
		3 (m)	6.0	2.0	92.1	101
		(f)	3.6	0.0	96.4	110

Table XXIII. Marital Status 15-29 Year Olds (Percentage)
HOPI

VAR	VALUE	MALES			FEMALES		
		MEAN	STD	N	MEAN	STD	N
All		1.42	.76	1004	1.37	.67	932
Twn	Sichumovi	1.70	1.06	56	1.55	.77	49
	Shipaulovi	1.17	.38	24	1.24	.51	29
	Shimopovi	1.80	.83	61	1.62	.78	66
	Walpi	1.24	.43	51	1.32	.64	45
	Meshongnovi	1.46	.61	69	1.40	.59	60
	Tewa	1.10	.64	39	1.03	.16	37
	Oraibi	1.38	.72	85	1.33	.76	87
	Pacabi	1.46	1.06	24	1.30	.73	20
	Moencapi	1.07	.25	30	1.08	.28	24
Liter	Yes	1.13	.34	86	1.14	.39	78
	No	1.50	.82	347	1.41	.72	316
Lang	Hopi	1.49	.82	349	1.42	.72	342
	English	1.15	.39	89	1.11	.31	73
Grad	Yes	1.18	.38	57	1.11	.31	56
	No	1.46	.80	382	1.40	.71	361
Dwltp	1	1.13	.40	40	1.08	.28	36
	2	1.48	.80	370	1.41	.71	356
Res	Yes	1.06	.25	31	1.08	.28	24
	No	1.44	.79	261	1.71	.90	28

Table XXIV. Marriages per Person, 1910
HOPI

might well have lacked children.

The homogeneity of the Hopi community is reflected in its low rate of exogamy--less than 2% at its peak--and the relatively slight variation observed in the numbers of marriages per person. (For the latter measure, see Table XXIV.) This information fits with our image of an ordered community where people changed partners relatively rarely and where variation in behavior would not be great.

In general, the Hopi marriage tables focus on two intriguing questions. First, can we assert reasonably that the population losses experienced after 1885 disrupted community patterns and the rise in population after 1900 allowed for their restoration?

It would seem that the return of men to previous pattern of marrying at about 22 and the return to a mean age difference of four to five years would support this, despite the fact that women did not return to their previous mean marriage age of 17.5. Second, how did the catastrophic population loss and its recovery affect women? Did women become more important or more able to break with social regulations? The influence of education and occupation on women's experiences would also be an interesting theme to explore. This was a homogeneous community--one can see patterns at work affecting the entire group--but where (and how severely) was that homogeneity strained?

E. WHITE EARTH

Table XXV indicates that mean age at marriage remained reasonably constant, with only minor fluctuations, for both men and women among the White Earth Chippewa between 1885 and 1930. Variability in age at marriage, as measured by standard deviations, was likewise fairly constant although there was some significant variation between bands. The average age of Removed Mille Lacs women at marriage was 16.63, more than two years less than for the reservation as a whole. Among the Otter Tail Pillagers, this measure revealed women marrying at a mean age of 19.46. What was the source of this variation? One can hypothesize that population pressures among the recently-relocated Mille Lacs band caused a dip in marriage age (it appears to have gone back up again in 1910 and 1930 as population began to rise again), but such speculation requires more checking.

Like age at marriage, the census figures summarized in Table XXVI indicate that the overall age difference between spouses did not change very much between 1885 and 1930, remaining just under five years. Men were generally three to five years older than their spouses, and this gap did not vary significantly among the many bands that were relocated to White Earth during the period under study. Larger differences in age between spouses appear to have been most evident in 1900 for those who married outside of

YEAR	VAR	VALUE	SEX	MEAN	STD	N
1885	ALL		Men	22.8	3.3	81
			Women	19.2	3.6	144
1900	ALL		Men	22.2	3.4	117
			Women	18.7	3.7	194
	Twn	Becker Co.	Women	19.40	3.88	94
		Polk Co.		18.57	3.65	7
		Norman Co.		17.85	3.47	54
		Beltrami Co.		22.5	3.54	2
		Becker & Norman Cos.		18.11	3.45	37
	Occ	Farmer	Men	22.39	3.22	64
		Labor/Service		22.72	3.20	18
		Skilled Labor		20.33	4.40	15
		Other		22.79	3.47	14
	Band	N.R. Mille Lacs	Men	21.50	6.36	2
			Women	17.50	4.95	2
		Removed Mille Lacs	Men	22.00	3.81	9
			Women	16.63	4.18	16
		Gull Lake	Men	21.86	3.34	7
			Women	18.36	3.83	11
		Fond du Lac	Men	18.50	3.54	2
			Women	17.67	1.97	6
		Pembina	Men	22.59	3.00	17
			Women	18.70	3.96	23
		Cass & Winnibigoshish	Men	19.50	0.71	2
			Women	15.25	1.71	4
		Mississippi	Men	22.40	3.06	43
			Women	18.82	3.24	67
		White Oak Point	Women	17.33	4.04	3
		Otter Tail	Men	22.43	3.52	14
		Pillager				
			Women	19.46	3.00	26
		Leech Lake	Men	25.00	4.47	5
			Women	19.63	4.44	8
1910	ALL		Men	23.0	3.7	183
			Women	19.8	3.7	279
	Rat	Yes	Men	22.72	3.60	147
		No		24.08	3.74	36
1930	ALL		Men	22.3	3.1	186
			Women	19.5	2.9	175
	Subgrp	Mille Lacs	Women	18.98	2.81	89
		Gull Lake		19.44	2.84	32
		Fond du Lac		19.14	3.58	7
		Pembina		18.98	2.33	42
		Cass & Winnibigoshish		17.40	4.39	5
		Mississippi		19.73	2.83	246
		White Oak Point		21.00	3.53	33
		Otter Tail		19.36	2.73	69
		Pillager				
		Leech Lake		20.00	2.18	20

Table XXV. Marriage Age
WHITE EARTH

YEAR	VAR	VALUE	MEAN	STD	N
1885	ALL		4.7	6.1	480
1900	ALL		5.0	6.8	880
	Occ	None	3.3	5.8	33
		Farmer	4.5	5.7	185
		Native	4.6	7.8	30
		Subsistence			
		Wage Labor	4.6	6.7	94
		Gov't. Employee	6.5	4.3	13
		Proprietary	7.4	9.4	14
	Exog	Yes	6.6	8.7	738
		No	4.7	6.3	142
1910	ALL		5.3	7.0	1189
	Liter	Yes (m)	4.9	6.5	423
		No (m)	6.4	8.0	167
	Res	Yes	5.9	6.8	271
		No	4.7	6.6	641
1930	ALL		4.8	7.7	575

Table XXVI. Age Differences
WHITE EARTH

the tribe (rising to 6.6 years) and, for 1910, for a smaller group of people who were not literate in English (6.4 years). Despite the disruptions of White Earth life, it would seem that the basic habits of marriage--when one married and the age of one's spouse--changed little between 1885 and 1930.

Table XXVII presents a profile of the marital status of 15-29 year-olds at White Earth between 1885 and 1930. It indicates that for the population as a whole, the percentage of people who were married, single and widowed did not appear to vary substantially while within the White Earth community sharp differences emerged. If one focuses on the experience of women, for example, one can see that while roughly a third of all girls of this age were married, a much smaller percentage of girls who were working for wages had taken a spouse. On the other hand,

YEAR	VAR	VALUES	MAR	WID	SING	N
1885	Sex	Males	27.5	4.1	68.4	877
		Females	28.1	11.5	60.4	858
1900	Sex	Males	29.0	0.6	66.7	1406
		Females	31.9	1.5	58.8	1444
	Twn	Becker (f)	34.5	2.3	57.9	171
		Polk (f)	71.5	0.0	28.6	7
		Norman (f)	43.0	3.2	53.8	93
		Beck.&Norm. (f)	50.0	1.6	43.8	64
	Occ	None (m)	0.0	0.0	100.0	2
		(f)	0.0	23.1	53.8	13
		Farmer (m)	73.0	4.2	18.8	48
		(f)	75.0	0.0	8.3	12
		Farm Worker (m)	11.0	0.0	88.0	25
		(f)	0.0	0.0	100.0	3
		Nat. Trades (m)	100.0	0.0	0.0	2
		U.S. Govt. (m)	60.0	0.0	40.0	5
		(f)	0.0	0.0	100.0	2
		Professional(m)	0.0	0.0	100.0	2
		(f)	0.0	0.0	100.0	1
		Labor/Serv. (m)	27.1	2.1	70.8	48
		(f)	0.0	7.7	69.2	13
		Skilled Lab.(m)	50.0	5.0	50.0	20
		(f)	0.0	0.0	75.0	4
		Mercantile (m)	50.0	0.0	50.0	2
		(f)	0.0	0.0	100.0	1
	Liter	Yes (m)	28.8	0.5	70.6	187
		(f)	36.7	1.1	60.1	188
		No (m)	17.9	3.0	76.1	67
		(f)	43.5	3.7	45.4	108
	Wbld	None (m)	12.6	2.5	83.2	119
		(f)	34.4	3.8	55.4	157
		Mixed (m)	32.2	0.6	67.3	171
		(f)	46.0	1.1	51.7	178
	Band	Mille Lac (m)	11.1	0.0	88.9	27
		(f)	28.6	0.0	68.6	35
		Gull Lake (m)	14.6	4.5	77.3	22
		(f)	33.3	4.2	62.5	24
		Fond du Lac (m)	14.3	0.0	85.7	7
		(f)	57.1	0.0	42.9	7
		Pembina (m)	33.3	0.0	66.7	33
		(f)	54.3	5.7	40.0	35
		Cass & Winni- bigoshish (m)	0.0	0.0	100.0	3
		(f)	100.0	0.0	0.0	3
		Mississippi (m)	32.7	0.9	66.4	110
		(f)	44.4	1.9	52.8	108
		White Oak (m)	0.0	0.0	85.7	7
		(f)	42.9	0.0	57.1	7
		Otter Tail	14.8	1.9	83.3	54
		Pillager (m)				
		(f)	24.0	4.3	60.0	70
		Leech Lake (m)	11.1	5.6	83.3	18
		(f)	31.6	0.0	57.9	19

1910	Twn	Becker Co. (m)	32.5	1.5	66.0	194
		Clearwater (m)	28.6	14.3	57.1	7
		Mahnomen (m)	24.3	1.0	74.8	202
	Occ	None (m)	6.9	0.6	92.5	174
		(f)	53.6	0.0	46.1	399
		Farmer (m)	66.7	3.3	30.0	30
		Farm Worker (m)	21.9	6.3	71.9	32
		Nat. Trades (m)	50.0	0.0	50.0	8
		U.S. Govt. (m)	58.3	8.3	33.3	12
		(f)	25.0	0.0	75.0	8
		Professional (m)	33.3	0.0	66.7	6
		(f)	0.0	0.0	80.0	5
		Labor/Serv. (m)	40.5	1.0	58.3	96
		(f)	8.4	4.2	79.2	24
		Skilled Lab. (m)	46.9	0.0	53.1	32
		(f)	16.7	0.0	83.3	6
		Mercantile (m)	77.8	0.0	22.2	9
	Empsta	Employer (m)	100.0	0.0	0.0	12
		Self-Employed (m)	76.5	0.0	23.5	34
		Employee (m)	36.3	2.3	61.4	215
	Res	Yes (m)	68.2	4.5	27.3	22
		No (m)	30.2	1.7	68.1	301
	Liter	Yes (f)	46.1	0.3	52.6	397
		No (f)	72.5	0.0	27.5	40
	Lang	Other (f)	100.0	0.0	0.0	1
		Indian (f)	100.0	0.0	0.0	2
		Chippewa (f)	78.8	0.0	21.2	33
		English (f)	46.6	0.2	52.2	408
	Wbld	None (m)	25.5	0.0	74.5	51
		(f)	44.7	0.0	51.8	56
		<1/4 (m)	20.9	0.0	79.1	43
		(f)	43.6	0.0	56.4	55
		1/4-1/2 (m)	39.2	4.8	56.0	125
		(f)	59.1	0.0	40.2	122
		1/2-3/4 (m)	20.4	0.0	79.6	98
		(f)	46.5	0.0	53.5	86
		>3/4 (m)	25.9	0.0	74.1	85
		(f)	37.9	1.1	60.9	89
1930	Sex	Males	27.0	2.6	70.3	4273
		Females	33.6	4.3	62.1	4309
	Atjur	1 (f)	34.7	0.7	64.6	559
		2 (f)	30.7	0.2	69.1	625
	Subgrp	Mille Lac (f)	25.2	1.0	73.8	206
		Gull Lake (f)	30.6	1.4	68.1	72
		Fond du Lac (f)	25.0	0.0	75.0	12
		Pembina (f)	34.0	0.0	66.0	103
		Cass & Winni- bigoshish (f)	50.0	0.0	50.0	8
		Mississippi (f)	33.4	0.4	66.2	547
		White Oak Point (f)	37.3	0.0	62.7	59
		Otter Tail	34.7	0.0	65.2	141
		Pillager (f)				
		Leech Lake (f)	44.5	0.0	55.6	36

Table XXVII. Marital Status 15-29 Year Olds (Percentage)
WHITE EARTH

among girls illiterate in English, nearly half were married in 1900 and nearly three-fourths were married in 1920. There do not appear to be any exact correlations between blood quantum and tendency to marry, but significantly larger proportions of mixed-blood girls in 1900 (46%), and 1910 (59.1--one fourth to one half--and 46.5--one half to three-quarters) were reported married.

If one scans the male subgroups reported in Table XXVII, a few significant variations from the tribal "norm" appear. In 1900, the relatively small number of farmers were overwhelmingly married (73%), but very few of the farm workers or wage laborers (11% and 27%) were. These numbers held true in 1910, except that the percentage of wage laborers who were married increased sharply. Perhaps, as the number of people reported as farmers decreased (it dropped here from 48 to 30), wage labor became less an occupation of unmarried young men and more a way of life. This impression is supported by the subgroups reported for 1910 under "EMPSTA," where self-employed males were about twice as likely to be married as those who were reported as "employees," and "RES" where two thirds of the 22 men reported living on their allotments were married as opposed to less than one third of those who were not. Interestingly, census measures of the proportions of "mixed" and "fullblood" residents who married showed no clear trend. While nearly three times as many "mixed blood" boys were married in 1900 as "full-bloods," the 1910 returns show no difference between the subgroups with the highest

and lowest proportions of non-Indian ancestry.

To understand why people at White Earth married when they did, it seems that we should look to external influences rather than internal, cultural traditions. Employment as wage laborers probably caused many to defer taking a spouse, while having one's own farm (an increasingly rare phenomenon) probably provided a greater opportunity to marry. For girls, those with limited experience in the white world, either through education or employment, tended to marry in larger numbers than those who did not. If one had access to a measure of wealth, it would be interesting to explore its relationship to marriage, because the figures provided here suggest that relative "success" in the non-Indian world would lead one towards marriage, though at a later age.

Table XVIII presents information a major feature of White Earth life: intermarriage with outsiders. The overall rate of exogamy rose by 10% between 1900 and 1910, but, as with other reservation-wide measures, there was substantial internal variation among resident subgroups. The difference between the exogamy rates of literate and non-literate reservation residents was more than 25 percentage points, while the difference between those who could and could not speak English was even greater. If anything, the difference between these groups was even more dramatic in 1910 than it was in 1900. For example, in the latter census none of the 111 young people whose first language was Chippewa was married to an outsider, while nearly a third of the

YEAR	VAR	VALUE	SX	%EXOG	N
1900	ALL		M	16.1	440
			F	16.1	440
	Occ	None	M	0.0	33
			F	0.0	2
		Farmer/Rancher	M	19.3	212
			F	94.1	17
		Farm Worker	M	50.0	16
		Native		0.0	3
		Government			
		Native Trades		0.0	30
		U.S. Government		9.1	11
		Professional	M	0.0	9
			F	100	1
		Labor/Service	M	9.3	54
		Skilled Labor		28.0	50
		Mercantile		0.0	5
	Liter	Yes	M	30.1	1193
			F	34.5	1218
		No	M	4.9	204
			F	6.9	142
	Spk	Yes	M	25.3	1269
			F	31.4	1204
		No	M	0.6	156
			F	2.6	193
	Farm	Yes	M	27.4	1124
		No		6.1	294
	Ration	Yes	M	0.0	37
		No		17.6	403
	Wbld	None	M	0.5	1188
			F	3.9	1229
		Mixed	M	8.1	197
			F	24.4	193

Table XXVIII. Exogamy
WHITE EARTH

YEAR	VAR	VALUE	SX	%EXOG	N
1900	Band	Non-Rem Mille Lacs	M	0.0	3
			F	0.0	3
		Removed Mille Lacs	M	0.0	28
			F	3.2	31
		Gull Lake	M	10.0	20
			F	26.9	26
		Fond du Lac	M	33.3	6
			F	50.0	12
		Pembina	M	0.0	56
			F	22.0	41
		Cass & Winnibigoshish	M	0.0	6
			F	0.0	6
		Mississippi	M	7.4	135
			F	19.7	142
		White Oak Point	M	0.0	8
			F	0.0	7
		Otter Tail Pillager	M	2.5	80
			F	3.5	85
		Leach Lake	M	0.0	30
			F	5.4	37
		Red Lake	M	0.0	1
			F	0.0	1
	Pexog	Yes	F	42.9	28
		No	F	14.3	412

Table XXVIII. Exogamy (cont.)
WHITE EARTH

YEAR	VAR	VALUE	SX	%EXOG	N
1910	ALL		M	26.2	596
			F	26.2	595
	Occ	None	M	11.3	71
			F	25.3	574
		Farmer/Rancher	M	48.6	146
		Farm Worker	M	0.0	10
			F	0.0	1
		Native	M	0.0	1
		Government			
		Native Trades		0.0	38
		U.S. Government	M	16.0	25
			F	33.0	3
		Professional	M	42.0	19
			F	100	1
		Labor/Service	M	16.7	174
			F	100	4
		Skilled Labor	M	35.4	79
			F	50.0	4
		Mercantile	M	20.0	30
			F	50.0	2
	Liter	Yes	M	35.1	419
			F	36.6	380
		No	M	4.8	167
			F	8.2	194
	Lang	English	M	32.6	479
			F	34.3	420
		Chippewa	M	0.0	111
			F	2.8	145
		Indian	M	0.0	6
			F	13.6	22
	Empsta	Employer	M	41.3	75
		Self-Employed		37.9	153
		Employee		19.7	296
	Farm	Farm	M	44.5	155
		House		19.8	404
	Res	Yes	F	57.0	93
		No		14.7	360
	Wbld	None	M	3.7	107
			F	6.6	136
		Mixed	M	11.7	377
			F	25.8	414
	Pexog	Yes	M	17.1	146
			F	38.0	129
		No	M	29.2	449
			F	22.8	464

Table XXVIII. Exogamy (cont.)
WHITE EARTH

479 whose primary tongue was English had chosen non-White Earth spouses. Both the 1900 and 1910 census reported that those with no white ancestry were extremely unlikely to marry outsiders (less than 10% for either males or females). For "mixed" groups, women displayed higher rates of intermarriage than men (in 1910, 25.8% of mixed blood women were intermarried as opposed to nearly 12% of the men). Additional research should help us understand the relationship between these patterns and the variation disclosed in the exogamy rates of White Earth bands. To cite one example, Otter Tail Pillagers intermarried at rates of 2-3%, while those identified as "Fond du Lac" displayed rates far higher than the tribal average.

Finally, Table XXIX, containing a summary of information regarding the numbers of marriage reported per person in 1910 appears to be a dog that does not bark. Rates of marriage were slightly higher for "fullbloods" than for those who were "mixed," and lower for people with occupations than for those with "none," but overall patterns are neither sharply defined nor easily interpreted.

The marriage statistics from White Earth allow us an opportunity to observe the impact of geographical relocation, economic change and intermarriage on a social institution. Our findings here are preliminary, but it would seem that people continued to marry at a constant rate and to marry at about the same time in 1930 as they had in 1885. Those who were engaged in the non-Indian world altered this pattern slightly--marrying

VAR	VALUE	MALES			FEMALES		
		MEAN	STD	N	MEAN	STD	N
All		1.21	.52	649	1.19	.51	695
Twn	Becker Co.				1.23	.58	327
	Clearwater Co.				1.13	.50	16
	Mahnomen Co.				1.16	.42	352
Occ	None	1.34	.73	86			
	Farmer/Rancher	1.14	.40	146			
	Farm Worker	1.10	.31	20			
	Native Government	2.00	--	1			
	Native Trades	1.23	.48	39			
	U.S. Government	1.27	.64	30			
	Professional	1.17	.37	23			
	Labor/Service	1.19	.46	182			
	Skilled Labor	1.31	.58	85			
	Mercantile	1.14	.55	35			
Liter	Yes	1.17	.43	453	1.12	.38	423
	No	1.32	.68	186	1.30	.66	245
Lang	Indian	1.50	.97	10	1.27	.52	33
	Ojibwa	1.38	.71	120	1.33	.70	181
	English	1.17	.44	518	1.14	.40	470
Ibld	Mixed	1.20	.49	427			
	Full	1.35	.72	109			
Rat	Yes	1.24	.56	511			
	No	1.10	.33	138			
Res	Yes	1.16	.46	185			
	No	1.26	.57	322			
Pexog	Yes	1.11	.37	163			
	No	1.25	.56	482			

Table XXIX. Marriages per Person, 1910
WHITE EARTH

earlier if they were farmers, later if they were laborers--but the census suggests that it held fairly constant. The great variation at the agency occurred among the pool of marriage partners. Increasingly, non-Indians were incorporated into the reservation through marriage. Their marriage habits were roughly the same, but other measures (household size, fertility, and wealth) may reveal that this infusion of outsiders helped create new divisions within White Earth society.

III. Intergroup Comparisons

A. Comparisons of Marriage Patterns

Several patterns emerge from comparing the data for all of the reservations. These reflect both similarities and differences between tribes. Patterns of temporal change also appear, as do patterns in internal variation.

Marriage Age. Marriage age for Colville men and women is significantly lower than for other groups, while that for men and women at White Earth and among the Creeks is significantly higher. Age at first marriage fluctuates significantly through time for both men and women in each tribe, but generally reflect demographic adjustments rather than long term changes. Variability on this measure also remains relatively constant through time for all groups. Marriage age for men at Hopi also remains fairly constant, but that for women increases over time. This moves Hopi women from the early marriage group in 1885 to the later marriage group in 1930. The differences between earlier and later marriages is small, but significant -- only about two years for either men or women.

Age Differences. Crow and Hopi are significantly more similar to each other than to the others. Both have lower age differences and slightly less variability on this measure than the others. This may reflect the greater isolation and

homogeneity of these two groups compared to the others. Age differences between spouses also fluctuate through time without showing a distinct trend for all groups. This measure is highly variable for all groups and variability generally increases over time for each.

Marital Status. Significant differences in the proportion of the sample population (15-29 years old) who were married existed between tribes. The lowest percentage married (27%-29%) occurred at White Earth and the highest (33%-54%) at Crow. Overall, women were generally more likely to be married than men in this cohort on all censuses. This proportion fluctuated considerably and showed a general decline for all groups.

One striking feature is the percentage of widows. This figure fluctuates widely for all groups, though there are relatively few. Significantly more women than men are widows among all tribes. A peak in the number of widowed women in 1900, which is at least twice other levels, appears on all reservations. This must reflect particular demographic incidents at this time (a smallpox epidemic struck in the Creek Nation in the winter of 1899-1900), but these do not show up clearly on the age-sex pyramids.

Number of Marriages. The number of marriages per person was only recorded in 1910, but still reveals patterns of similarity among the tribes. Crow and Hopi, though significantly different, both had relatively high numbers of marriages per person (1.42-2.80), while the other tribes averaged relatively few (1.1-1.2).

The Crow and Hopi have the highest numbers, while the Colville have the lowest. White Earth and Creek have numbers higher than Colville, but are generally similar. It seems likely that greater contact and involvement with Euro-American society among these three tribes accounts for this similarity and their difference from the other two groups. Certainly, no similarities or differences in the aboriginal cultures of the five would account for the observed pattern.

Exogamy. Exogamy, available for 1900 and 1910, reveals a much more striking pattern. In 1900, less than five percent (5%) of the individuals in most groups are marrying out of their group. The exceptions are at White Earth, where about sixteen percent (16.1%) married exogamously, and among the Creeks, where over a quarter of the people married exogamously. Significantly more Creek women (33%) did so than did Creek men (23%). The rate of exogamy exploded on White Earth and Colville in 1910. On the former it rose from about 16% to almost 27%, while on the latter it more than quintupled from about 4.5% to about 27%. At Crow and Hopi exogamy also rose, but remained at less than 5% (less than 1% at Hopi).

B. Comparison of Internal Variation within Groups

Several social and economic factors influenced or were associated with variation in marriage patterns for each group.

These show both patterns of association between tribes and trends through time.

Internal Divisions. Internal divisions played a significant role in patterning marriage practices among all groups except the Crow and Creek, for whom these are not reported. In 1885, only Colville was so affected, but on later censuses most marriage practices varied in regard to internal divisions. Among all of the tribes for which they are reported, internal sociopolitical divisions affected the most aspects of marriage patterns and produced the greatest differences between groups in 1900 and 1910.

The size of the effects lessened at Colville after 1900, but the differences among Hopi towns are greatest in 1910. The degree of difference between divisions declined for all groups in 1930. Internal divisions were not reported for either Crow or Colville on this census.

Economic Factors. Economic factors (including occupation, choosing farm or home schedule, and accepting rations) affected a wide variety of marriage practices among all groups. These affected the most aspects of marriage behavior among the Creeks and produced the largest effects of any variables. Among the White Earth Chippewas these were second to band affiliation in 1900 and to education in 1910.

In general among all groups and in both years, farmers (listed by occupation or filling out farm schedule) were more likely to be married and to marry earlier than others. Most male

wage laborers, on the contrary were unmarried. Skilled laborers and female wage workers, however tend to be married or widowed. Merchants, professionals, and similar occupations (all with few members) tended to be anomalous in their marriage practices. This suggests that most unskilled or semiskilled workers are younger men, while older men farm, engage in traditional subsistence activities, acquire skills, or engage in commercial activity. Women seem to move into wage labor largely after marriage, indicating the increased need for cash to support families at this time.

Acceptance of rations is significant among the Crow and at White Earth, but reflect different economic realities. Among the Crow, it is primarily associated with marital status and exogamy among women. Here heads of households, particularly exogamous women, were the primary recipients. This may reflect a greater dependency on the agency among this group. At White Earth there is a negative association with exogamy, suggesting that only full-blood foragers relied on rations.

Among all groups, economic variables declined in the extent and degree of their impact on marriage practices between 1900 and 1910, but retained their importance relative to other kinds of factors in patterning variation, except at Hopi. Among the latter, economic differences seem to reflect differences between active adults (farmers and native trades) and either subadults (farm workers and unemployed) or "retired" adults (unemployed and native trades). Unlike the other groups, new economic

opportunities made few inroads at Hopi and produced little variation.

Education. Factors associated with education and exposure to Euro-American culture (schooling, literacy, and ability to speak English) are significantly associated with marriage patterns among all groups in 1900 and 1910. This is strongest among the Crow, where they affect all aspects, and among the Creek where they are associated with most. Those who are literate, in school, or speak English are less likely to be married, but more likely marry exogamously among all groups. In part this reflects age differences, with younger people more likely to have positive values on these variables. This group also tends to marry later, except at Crow, where educated women marry younger. While the range of marriage practices affected declines slightly over time, the extent of differences increases among all tribes. At Hopi and White Earth, educational variables increase in their relative importance from 1900 to 1910, but they decline slightly among the Crow.

Intermarriage. The final group of factors affecting marriage patterns derives from the effects of intermarriage, particularly to whites. This group includes the degree of white blood (or black blood among the Creeks), parental exogamy, and personal exogamy. White ancestry is most prominent among the Creeks where it is associated with differences in all features of marriage patterns and at White Earth where it is associated with marital status and exogamous marriage. In general, mixed

ancestry and parental exogamy tended to increase the probability of marrying exogamously and to decrease the number of marriages per person. In part this may reflect age differences. These factors had no significant effect at Hopi where intermarriage was rare throughout the period under study. Degree of white ancestry becomes more important through time at Colville and among the Crow, while continuing to be important among the Creeks and at White Earth.

Some significant differences exist in the impact of mixed ancestry. Among the Creeks, such persons were more likely to be single, though such persons were more often married at White Earth. The age difference between spouses was greater for mixed-bloods among the Creeks, but at Colville the reverse was true.

Locality. Locality of residence (TOWN) also influenced marriage among all groups where it is reported. In most cases, however, the listed localities are not consistent from one census to another, making comparisons between censuses problematic. In addition, locality likely reflects the interaction of other variables rather than operating independently. Among all groups, native sociopolitical divisions, economic and educational opportunities, and white settlement are all generally localized. Mixed-bloods are similarly geographically concentrated among the Creeks and White Earth Ojibwas.

Demography. Two of the reservations experienced dramatic population losses during the period under study. Crow declined from 2461 in 1885 to 1832 in 1910. At Hopi the population also

dropped, from 2138 to 1936, between 1885 and 1910. The enumerations indicate a corresponding drop in age differences between spouses and decline in marriage ages, particularly for men, at both agencies. At the agencies which did not experience such a catastrophe, this pattern did not emerge. Various aspects of marriage patterns, particularly proportions of married and widowed persons, are also affected by demographic factors on the other reservations as well.

IV. Conclusions

Based on the comparisons made possible by this study, we have reached the following, tentative conclusions:

1. Despite increasing intermarriage, marriage age and age differences between spouses remained largely stable for all tribes. Changes in these practices seem to have responded primarily to demographic factors, particularly mortality and the size of the available marriage pool. Marriage ages and age differences between spouses fluctuated around "ideal" patterns in all groups as they responded to particular circumstances.

2. Exogamy was an increasingly powerful new force in shaping Indian family life. Increases in exogamy clearly accompanied allotment and the influx of white settlers into Colville and White Earth in the early 1900s. The decline in female exogamy among the Creeks undoubtedly also reflects the

allotment process as well. When land in the Creek Nation became available to homesteaders after 1900, white men no longer needed to marry Creek women to gain access to it. Nevertheless, the rate of exogamy for Creek men rose from 22.9% to 29.7% at this time. The relative isolation of the Crow and Hopi largely protected them from this process, though even their exogamy increased through time.

3. All tribal groups grew increasingly heterogeneous during the period under study. Heterogeneity was dependent in part on the extent and degree of involvement with other groups. Such involvement broadened potential marriage choices (as reflected in increasing exogamy) and produced greater cultural and economic opportunities. Educational achievement increased as contact with, and integration into, American society progressed. Growing social, cultural, and economic diversity was reflected in the marriage patterns. It is instructive that the most isolated tribes, with the fewest alternatives, are also the most homogeneous and stable.

4. New marriage patterns emerged among those involved with education and the market economy. Some of this new pattern may reflect generational differences, but it was also apparent on those measures which control for age. Young, unmarried men engaged in wage labor, particularly as farm laborers, but shifted to other activities as they aged and after marriage.

Two distinct patterns appeared here among employed men. One group of more traditional men (with the possible exception of

White Earth) shifted to farming and ranching. Their marriage practices remained relatively constant. Another group chose commercial, professional, or skilled trades and displayed strongly divergent marriage practices. The data suggest, therefore, that choice of nontraditional occupations and educational paths accompanied (or caused) other important cultural changes and choices not directly evident in the data. The declining proportion of 15-29 year olds who were married undoubtedly reflects the shift from traditional subsistence economies to capitalist cash economies, as does the pattern of women engaging in wage labor after marriage.

5. Exogamy, occupation, and education interact to produce new marriage patterns. This is particularly evident among the Creek and at White Earth. Mixed-bloods more often pursued education and nontraditional occupations than did full-bloods. Mixed-bloods also tended to be geographically concentrated in both groups. While there is variation here -- members of both "traditional" and innovative groups could follow similar paths -- the trend is toward increasing divergence in marriage patterns based on these three factors.

6. From this study, several questions arise which merit further research. In part, these regard the effects of social heterogeneity, size, geographic isolation, and intermarriage (or a large mixed-blood population). Understanding the extent to which the similarities and differences found here reflect larger trends requires a larger sample. Future studies also need to

control for additional factors which seem potentially relevant here. Specifically:

A. The most homogeneous groups studied, Hopi and Crow, are also the most isolated. It is not possible, therefore, to separate the effects of each factor. Comparing Hopi with the Rio Grande Pueblos could shed light on the relative importance of conservatism and isolation. The Crow could be compared to the heterogeneous Fort Peck Reservation or to one of the Southern Plains tribes in Oklahoma, such as the Kiowa or Comanche, to understand the impacts of heterogeneity and interaction with Euro-Americans. A direct comparison of the Northern and Southern Cheyennes would be particularly illuminating regarding the effects of incorporation into Euro-American society.

Similarly, the two groups who interacted most with Euro-Americans, White Earth and Creeks, also had the highest proportion of native mixed-bloods and were among the most heterogeneous. Comparison of the Creeks with the culturally similar Oklahoma Seminoles, who were more conservative and who had fewer "mixed-bloods" could illuminate the roles of these factors in social change. Similarly, a comparison of White Earth with more conservative, full-blood reservations, such as Red Lake, provides a check on the role of intermarriage and economic change.

B. Regional comparisons would indicate the extent to which particular styles emerged in particular areas. The Flathead reservation compares well with Colville, and Rosebud and Pine

Ridge make good comparisons to Crow. An examination of a Wisconsin reservation could provide a comparison for White Earth, as would the Oklahoma Cherokees or Choctaws for the Creeks. Zuni provides a similar case to Hopi.

C. Several groups were not covered in this study.

Northeastern agriculturalists were omitted and the Iroquois or one of the Midwestern Algonquian tribes, such as the Sac or Kickapoo, could provide information on their responses to conditions to this period. The Northwest Coast deserves similar consideration, as do the Southern Plains and the Prairie tribes, such as the Osages and Pawnees. All of these groups differ sufficiently in cultural practices and contact histories to warrant further study. In a similar vein, study of the North Carolina Cherokees, Florida Seminoles, and Mississippi Choctaws would illuminate the consequences of very different contact histories.

D. Comparison to Canadian Indians would also benefit our understanding of the effects of particular contact histories and the role of governmental policy. It would be interesting to view the effects of the American assimilationist policies on Indian social life.

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REPORTS OF THE AMERICAN INDIAN FAMILY HISTORY PROJECT

by

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PART THREE: HOUSEHOLDS

1992

TABLE OF CONTENTS

I. Introduction	1
A. Household Characteristics	2
B. Household Organization	3
C. Patterning of Variation	5
D. Temporal Change	7
II. Profiles of Tribal Household Structure	8
A. Colville	8
B. Creek	12
C. Crow	16
D. Hopi	19
E. White Earth	23
III. Comparisons Between Tribes	27
IV. Conclusions	29

I. Introduction

Students of family history have long cautioned that households and families are different things. Families are made up of people who consider themselves kin; households consist of people who share a dwelling. Despite their differences, however, households and families are essential units in any analysis of a community's social life. For American Indians, it is crucial that households be examined as a separate analytical category because the available census data were gathered by enumerators who were indifferent to, or unaware of, native kinship systems that differed from the Euro-American norm. Understanding tribal household structure might well shed some light on the distinctive patterns, if any, in the five communities under study. Tracing their change through time should also reveal the influences that acted upon both households and families in the early reservation era.

In analyzing household organization we looked at several features. These features included size of household (FAMSIZE), percentages of household membership consisting of various groups of children, recruitment and membership, characteristics of the heads, and internal organization and differentiation. Where applicable, (drawing on data from the 1900 and 1910 federal returns) we also looked at dwelling type and size and patterns of household extension.

In addition to describing household size and organization,

we attempted to isolate factors associated with the patterning of variability within each group. Such factors included locality, tribe or band, and characteristics of the head of household. We also attempted to describe the specific characteristics of people who inhabited various types of extended or non-extended households, as well as the profiles of those who lived in different types of dwellings.

A. HOUSEHOLD CHARACTERISTICS

We examined the size and composition of households. We asked, not only "how many people lived here?" but also "How many of these were children? How many were grandparents?" We looked at three categories of child-occupants. These were all children under 16 years of age, all children of the head, and heads' children under 5 years of age. In each case the percentage of the household consisting of the appropriate group was determined using the formula $CHx/FAMSIZE$.

Thanks to the extended questionnaire used in the 1900 and 1910 federal census, we were also able to examine forms of extension (including none) and dwelling size (single family or multifamily) for each group, computing their frequencies in the overall population of households. In a similar way, dwelling type was also examined in 1900 (fixed and movable) and in 1910 (civilized and aboriginal). The sample for all of these

statistics used only heads of households so that information on each household appeared only once.

B. HOUSEHOLD ORGANIZATION

We began our examination of household organization by focusing on the heads of households. In this way, we could determine the proportions of households with male and female heads and understand the entire unit in terms of this leader. We were also able to examine households headed by single, divorced or widowed individuals.

We analyzed household recruitment and membership by tracing several characteristics of household members. The first of these was relationship to the head of household. We also looked at the age, sex, and marital status of various categories of relatives in the household and whether or not these additional members (people other than head and spouse) had children in the household.

It was clear from the outset that many of the categories used by census enumerators were not are culturally relevant or appropriate. Clearly these people applied ethnocentric criteria in assigning senior (though not always most senior) males as heads in most situations. Likewise, it is often doubtful whether or not native kinship relations were specified in the terms of relationship recorded in the census returns. Certainly adoption

and/or fosterage are under reported as is the incidence of stepchildren. The presence of children who are older than their "mothers" or who were purportedly born when the mother was under 11 years of age clearly indicates this possibility.

In addressing marital status, we have applied certain terms in a specific manner. "Married" or "currently married" includes the two census categories "Married with spouse present" and "Married with spouse absent". "Previously married" includes widowed and divorced or separated. In general discussion, and unless specified otherwise, references to households or persons without a spouse indicates the category "Married with spouse absent".

For the sake of uniformity and clarity, the term "dependent" applies in our discussion to all household members other than the head or spouse. Similarly, unless indicated otherwise, the term "spouse" in a general context refers to the spouse of the head of house. All other relationship terms used in general discussions also refer to relationship to head unless indicated otherwise.

In addition to the general demographic make up of the tribal households under study, we also examined economic and cultural differentiation within each community. Among the economic factors examined were occupation, property ownership, and tax status of household members. The cultural factors included language spoken, literacy, and name type. In each case, the association between relationship to head of house and the variable under consideration was determined using the chi-square method.

C. PATTERNING OF VARIATION

Locality, tribal or band affiliation (internal subdivisions), and head's characteristics were all tested for relationships to variability in household organization. Locality, represented on the censuses by TOWN (1900 and 1910) and ATJURIS (1930), and internal social divisions, represented by TOWN (Hopi), TRIBE (Colville), BAND (all in 1885, White Earth 1900), and SUBGROUP (all 1930), provided primary foci for examining the patterning of internal variability. Neither of these was available for the Crow and subgroups (tribal towns) were not reported for the Creek. Subgroup information was also missing for everyone except Hopi in 1910 and for Colville in 1930. Locality and subdivision were coterminous for the Hopi.

Characteristics of the head of house also provided a basis for examining patterned variability. Demographic, social, economic, and cultural attributes all entered this analysis. Demographic characteristics included sex, age, and marital status. Social characteristics applied primarily to blood quantum as reported on the censuses (1900-1930). Economic characteristics considered included several variables relating to occupation and economic activities, property ownership, and tax status. The specific variables, available only for 1900 and/or 1910, included occupation, employment status, acceptance of rations, live in farm home, own or rent home, reside on own property, taxed or not. The cultural attributes considered

included language spoken, literacy, and type of name. All of these were available only in 1900 and 1910.

The group variables, whether locality, subgroup, or head characteristic, were used to create nominal categories whose characteristics were statistically compared. These comparisons used the chi-square technique for nominal data (relation to head, sex, marital status, etc.) or the analysis of variance technique for continuous, numerical data (age, family size, percentage of children, etc.). Only differences significant at the .05 level of probability or better were included. We also generally excluded any group with a population of less than 20 and by preference less than 30. Smaller groups are sometimes discussed in the context of larger discussions, but differences between them and other groups may not be statistically significant or meaningful.

We also compared different kinds of households for other differences such as type of extension, type of dwelling, and dwelling size. We applied the same kinds of analyses to the relationships of these variables as to the previously discussed factors. The purpose of this analysis was to determine if different types of extended households or households living in different kinds of dwellings significantly differed from each other in other ways.

D. TEMPORAL CHANGE

Owing to time constraints it has been difficult to analyze all of the available data from the perspective of temporal change. Nevertheless, consulting the relevant tables and discussions for each year and comparing them with each other indicates an apparent general trend toward more narrowly nuclear households through time among all groups. This occurs despite clear and significant differences in baseline organization among the five tribes considered. It remains to consider the impact of this universal shift on other aspects of family life such as marriage and fertility.

II. PROFILES OF TRIBAL HOUSEHOLD STRUCTURE

A. COLVILLE

According to the data the average size of households on the Colville reservation declined from 3.01 in 1885 to 2.25 in 1930. (The 1910 census reported a rise in this figure to 3.4, but the questions raised about that census make possible that this is a reflection of the enumerator's bias rather than a social fact.) As with other measures, of course, average figures mask significant variability within the community. Consistently, for example, the largest households were headed by married couples. Dependents in such households were consistently younger than their counterparts in families headed by single people. In addition, households in fixed dwellings were generally larger than those in tents, tipis or other movable structures, and households headed by a wage laborer or a farmer were generally larger than those headed by someone who was unemployed or pursuing "native trades." Finally, households headed by educated and/or literate individuals, as well as those with a significant degree of white ancestry, also tended to be larger and to contain young children.

It would seem, then, that even though overall household size grew smaller at Colville, larger households were consistently those made up of married couples in which the head was involved in the white world by way of education and commercial activity. Smaller households were generally headed by single adults and

composed of people with less Indian ancestry, less involvement in the non-Indian economy, and less education. In 1900, for example, Colville heads of household who reported their occupation as "farmer" lived in families of 3.63 people, where those who reported that they received "rations" from the government had a mean household size of 2.13.

Only the 1900 census contained useful information regarding dwelling types, but this enumeration revealed a clear pattern that reinforces the outline sketched above. "Movable" or "Aboriginal" dwellings were generally home to smaller families, frequently headed by single adults. (In 1900, 64% of the single heads of household lived in movable dwellings.) Movable dwellings were also headed by a disproportionately high number of illiterate Colvilles and of reservation residents who received rations. "Fixed" dwellings contained larger households within each census cohort, as well as larger numbers of employed people, particularly farmers. While the Colville enumerators did not record data on dwelling type in 1910, it would seem that the number of "aboriginal" dwellings would probably have declined by then. Perhaps this is why the percentage of Colville households reporting some form of extension also rose in those ten years from 10% to 17%.

What was the make-up of these households? Until 1930, fewer than 21% of Colville households consisted of a single individual, and no more than 30% of them contained two people or less. At least half of reservation residents lived in households of three

or more.¹ Roughly a quarter of Colville households contained children under 16. Very few household members other than the head were married. In 1900, for example, there were only two cases of married household members (with spouses present) who were not heads or the spouses of household heads. Of the other household members, most children lived in households headed by a married couple, while the majority of grandchildren, half of the cousins, and a high percentage of siblings lived in houses headed by single adults.

These data support the idea that at Colville two types of households appear to have emerged in the early twentieth century. On the one hand, relatively large, nuclear households of married couples and children were most plentiful among tribal members who lived in fixed dwellings and were educated and/or engaged in the cash economy. On the other, Colvilles who lived in movable structures and were not tied to the outside world through education or trade tended to live in households headed by single individuals and containing a relatively large number of relatives other than their children. These households likely served as "replacement homes" for elderly, unmarried kin who had little contact with non-Indians. Households with such kin show a patrilineal/patrilocal bias, though most of these people are female.

¹ These figures shift dramatically in 1930, with 66% of the population in families of one or two people, but the peculiarities of that enumeration are such that it is difficult to know if this number is reliable.

Detailed data on Colville households is available in a preliminary research report, "Analysis of Households," written by Richard Sattler. A summary of household information drawn from the data sets appears below.

Colville Households, 1885-1930

	1885	1900	1910	1930
Population	1443	1170	1548	2958
Households	476	390	456	1314
Mean Size	3.01	3.0	3.4	2.25
% Single Person				
Households	4.7	15.8	20.3	50.0
% 2-Person	21.5	29.2	23.9	16.4
Households				
% Households w/	24.0	20.0	25.0	--
Child<16				
% Households w/	5.6	4.6	8.3	--
Child<5	--	40.0	3.0	--
% Movable	28.0	35.0	42.0	--
% Single Head	2.0	1.0	7.0	5.0
% Affinal	--	10.0	17.0	--
% Extended	--	12.0	16.0	--

B. CREEK

While mean household size for the Creeks fell from 5.4 to 4.7 between 1900 and 1910, the two censuses offer a picture of relative consistency. Patterns of household composition and the sources of variation within the tribe appear to have held constant during the ten years separating the two enumerations. The overwhelming majority of Creeks lived in households headed by a married spouse (76% in 1900 and 80% in 1910), and the majority of the dependents in these households were unmarried children. In 1910, only 1% of household dependents among the Creeks were married. With virtually no movable dwellings, Creeks occupied permanent, relatively large homes peopled largely by blood kin.

One of the most significant variations within this common picture of Creek households headed by married couples is the difference between extended and unextended families. While the level of extension fell from 1900 to 1910 (29% to 25%), it remained higher than any except Hopi, and the location of the extended families followed an interesting pattern. Households headed by fullbloods, widows, and illiterate Creeks were more likely to be extended than those headed by mixed bloods, educated Creeks or married couples. Moreover, more extended households were recorded in Okmulgee and Okfuskee counties (home to a disproportionate number of illiterate full bloods) in 1900 than elsewhere. While extended families were as large, or larger, than nonextended families, they tended to contain fewer children. This, of course, would be particularly true of vertically

extended households containing more than two generations of a family. Interestingly, in 1900, households headed by farmers exhibited the greatest tendency to be laterally extended. The Creeks in fact have the highest portion of laterally extended families of any group studied. Most of this lateral extension reflects either joint households consisting of sisters and their children or unmarried males living with sisters. All extended households showed a matrilineal and matrilocal bias, reflecting traditional practices.

Another factor in the creation of extension among the Creeks was time. The mean age for the heads of vertically extended households in 1900 was more than ten years higher than it was for nuclear households (50 vs. 39). Laterally extended families were headed by people whose mean age was 37. This data, along with the composition of extended households suggests a developmental cycle for Creek households, with stem or extended families as the normative ideal. Joint (laterally extended) households may have succeeded extended households or present an alternative norm. This pattern is at least true for 1900 and 1910, and is still evident among some conservative Creeks, but it is likely that it began to break down in later decades among many tribal members.

The large Creek tribe encompassed a host of variations on the broad patterns sketched above. Three related factors seem to lie behind the most significant of these. First, there is a strong relationship between household structure and location (particularly in 1900). Muskogee and Tulsa counties, more

heavily settled by non-Indians and closer to commercial activity, reported different households than Okfuskee and Okmulgee counties. The former tended to be larger, less extended and contain larger numbers of children. Second, households appear to have increased in size in direct proportion to the "white blood" quantum reported for their heads. The more "white" a household head, the larger the household and the more likely that its membership will contain children. "Full blood" heads lived in households which reported the smallest mean size, the lowest percentage of children, and the greatest variety of extended kin. In both enumerations, households headed by "mixed bloods" fell between these extremes, but were substantially larger than those headed by "full bloods."

Finally, occupation, particularly occupational categories that reflect property-ownership and wealth, appeared to create new household structures. Farm households were larger than non-farm households, as were those headed by individuals who were taxed and who owned their property. Such households tended to have more male dependents than female ones, while nonfarm households contained a disproportionate share of female dependents.

While the size of Creek households was relatively large, the onset of white settlement, education and an increasingly commercial economy was clearly driving the tribe towards smaller and more uniform social groupings. Tribal members in particularly isolated locations, as well as those who held

themselves apart from the majority culture, account for most of the variation in the tribe's household structure as these individuals sustained smaller households and supported a wider network of kin obligations. The principal exception to this picture is the curious emergence of laterally-extended families among relatively prosperous Creeks. While they may have maintained a kin network broader than their white neighbors, it was clearly not the same as that of their poorer, "full blood" kinsmen who were engaged in other occupations.

Creek Households, 1900-1910

	1900	1910
Population	8777	2132
Households	1621	456
Mean Size	5.4	4.7
% Single Person Households	4.8	3.7
% 2-Person Households	12.1	15.7
% Households w/ Child<16	38.3	36.1
% Households w/ Child<5	10.6	12.5
% Movable	1.0	0.0
% Single Head	24.0	20.0
% Affinal		
% Extended	29.0	25.0

C. CROW

It is difficult to draw conclusions about Crow households from the census data because, with the exception of the 1885 census, enumerations at that agency appear to have been based on "family" rather than household. For example, the 1910 census indicates that 31% of the households contained a single individual; this is in a rural community with a tremendous housing shortage. It is unlikely that one third of the reservation population lived occupied solitary dwellings. Despite this caution, however, several significant trends can be traced through the census data.

First, it would seem that households did become increasingly "nuclear" during the period under study. Not only did the mean size of households decline, but--more important--the percentage of Crows household members who were neither parents nor children also dropped dramatically. In 1886, 26% of the tribe was enumerated in categories other than head, spouse or child. In 1930 that figure had dropped to 2%. In addition, with the recovery of Crow population from 1910 to 1930 (a recovery that occurred with relatively little exogamy), the proportion of household members who were children increased. It would seem therefore that in 1930 Crow households contained members of a nuclear unit and few other relatives.

Even as the composition of Crow households reflected a preference for a nuclear "norm," a new distinctive pattern emerged: a growing number of single-headed households. In 1910,

58% of tribal households were headed by a married couple; in 1930 that number had shrunk to 49%. This figure might reflect an anomaly in the enumeration itself, but the high marriage rates at Crow and the continuing high mortality rate there make it plausible that the picture of a growing number of single-parent households is accurate. This trend could reflect the increased impoverishment of tribal members and the impact of social dislocation.

Within the overall structure of Crow households during the period 1885-1930, three major (and overlapping) variations were evident. First, the 1900 and 1910 enumerations make clear that about 15% of the households were "movable." (In this part of the country, "movable" dwellings were tipis or tents.) Households in movable shelters generally were smaller than those in "fixed" ones (i.e., cabins), and contained a relatively large number of relatives other than spouses and children. In 1910, these households had the smallest mean household size on the reservation and the highest mean age among its dependent members. In addition, nearly half the heads of these "movable" households were unemployed. Most dependents in these households, other than children, are either juveniles or older widowed persons. Brothers are also more common than sisters, and patrilineal relatives more common than matrilineal ones. The picture revealed by these data, then, is of one group of households made up largely of married couples and their children living in cabins, and another made up of related adults with a relatively

small number of children living in tents. The latter group was headed by a disproportionate number of widows.

The second divisions among Crow households was between those headed by "fullblood" tribal members and those headed by "mixed bloods" or whites. Fullblood-headed households were consistently smaller and consistently contained a wider assortment of relatives than those headed by either mixed-bloods or whites. White-headed households were the largest, with mixed-blood-headed ones falling slightly behind them.

Finally, qualities reflecting contact with non-Indians--education, literacy and employment--were strongly associated with larger, more youthful households. In a pattern that echoed statistics on movable dwellings and blood quantum, educated, literate and employed Crows tended to live in the largest households and these contained the largest number of children. In addition, of those who were recorded as living on their "own land" in 1910, most were in larger households occupying "fixed" dwellings. Only 28% of the "movable" households in 1910 were on the head's "own land."

While Crow, like other reservations, deserves additional scrutiny, it appears that while the overall size of tribal households was shrinking during the early twentieth century, homes of Indians engaged in the external world were larger and more fertile. On the other hand, these households contained a smaller variety of relatives than those headed by people who, for whatever reason, had less contact with the outside world.

Crow Households
1885-1930

	1885	1900	1910	1930
Population	2461	1876	1832	1967
Households	627	670	719	715
Mean Size	3.9	2.8	2.5	2.75
% Single Person Households	2.0	16.0	31.0	39.0
% 2-Person Households	16.0	48.0	30.0	62.0
% Households w/ Child<16	--	21.0	21.8	24.8
% Households w/ Child<5	--	7.0	7.6	10.8
% Movable	--	14.0	16.0	--
% Single Head	--	3.0	42.0	51.0
% Affinal	10.0	>1.0	>1.0	
% Extended	--	14.0	2.0	--

D. HOPÍ

With little exogamy and a relatively permanent home in ancient multifamily structures, the Hopis present a fascinating case of cultural persistence during the early twentieth century. Hopi population was under severe strain, dropping to 1936 in 1910, and adjusting to the forced attendance of children at boarding school and other instances of outside control. Overall household size appears to have dropped between 1910 and 1930, but throughout the period these figures were higher at Hopi than at any of the reservations under study. A very small percentage of Hopi households consisted of one or two people or were headed by single individuals.

For the two censuses that carried data on extension, the Hopis exhibited very high rates: 42% of Hopi households were extended in 1900, and 53% in 1910. Despite concerns about the census enumerators' ability to comprehend Hopi lifeways, then, the data confirm our standard picture of the reservation as being inhabited by a community of people who maintained an ancient way of life into the modern era. The largest Hopi households were those that were extended, and among those, the majority were extended vertically. That is, they contained grandparents and grandchildren, many of whom were married. In 1910, for example, households both vertically and laterally extended contained the highest concentrations of married dependents, while those that were reported "nonextended" reported the lowest. The pattern for laterally extended households fell between these two; the data suggest a dominant pattern of widowed or single siblings living with a couple and their children. Likewise, multifamily dwellings at Hopi may reflect kin-clusters, since the villages with most of these buildings had lower rates of extension.

Significantly, information on literacy indicates that English and the ability to write were concentrated among the younger generations in each household. Thus, while census figures indicate a growing number of single-person households, the Hopis consistently showed themselves to be a group committed to large, extended households. The passage of time does not appear to have changed this commitment.

While exhibiting fewer social divisions than other groups

(intermarriage with whites was rare, occupational options were few and no one lived away from traditional villages), there were still some variations within the overall Hopi pattern. First, some villages exhibited higher degrees of extension than others. In 1900, for example, Sichomovi and Shongopavi contained two-thirds of all the household members reported as "parents of head." Ten years later, Shongopavi reported one of the highest concentrations of grandchildren within households. Similarly, in both 1910 and 1930, Meshongovi reported the largest households on the reservation as well as the highest concentration of extended families and the most types of resident relatives. Not surprisingly, Oraibi, the center of ongoing religious controversy and regularly identified as a "friendly" village, reported relatively few categories of relatives in both 1910 and 1930 and a disproportionately large percentage of household members who were children. Here perhaps, more than elsewhere, the European norm of nuclear families made up of parents and children was the rule. A similar pattern is also apparent at Bacavi, an offshoot of Oraibi. Hotevilla, new home of the Oraibi "traditionalists," reported high concentrations of extended households in 1930.

Other categories that were associated with significant variation at other reservations--occupation, education and literacy--produced new patterns at Hopi but they involved a relatively small proportion of the tribe. Farmers' households contained the vast majority of all those reported "extended," but most tribesmen were farmers, so the correlation is relatively

meaningless. Households headed by literates were smaller and contained a relatively high number of children under five, but here again, the category represented a relatively small part of the tribe. Consistency and homogeneity continue as dominant impressions of household life at Hopi.

	Hopi Households 1885-1930			
	1885	1900	1910	1930
Population	1088	1964	1936	2469
Households	226	389	334	593
Mean Size	4.79	5.0	5.8	4.17
% Single Person Households	2.0	2.0	4.0	12.0
% 2-Person Households	10.0	14.0	9.0	16.0
% Households w/ Child<16	32.3	36.7	41.7	31.3
% Households w/ Child<5	10.0	10.9	8.3	9.3
% Movable	--	0.0	--	--
% Single Head	13.0	11.0	16.0	27.0
% Affinal	9.76	8.0	9.0	--
% Extended	--	42.0	53.0	--

E. WHITE EARTH

Questions related to the two BIA censuses for White Earth limit the usefulness of the information gathered on households. In 1930 it is clear that non-Indian spouses or family members were excluded, leaving more than 2200 people to be listed as single heads of households. The absence of non-enrolled family members both reduces and skews our sample. The relatively low mean household size for 1885 also raises questions about that year's BIA census, but there is no evidence that it is as flawed as the 1930 enumeration. The following discussion ignores the figures for 1930 presented in the following table.

Despite problems with the White Earth data sets, they indicate consistently that this was a reservation of single-family households made up largely of heads, spouses, and children. 97% of reservation residents fell into that category in 1885. That figure dropped to 88% in 1910, marking a rise in the number of extended households. This trend is somewhat ironic as one pictures a community's move from "tradition" to "modernity," but the rising level of poverty at White Earth and the rapidly growing population, accompanied by a loss of land base, may well have accounted for an expanding pool of extended family members who were in need of a home. (It is worth noting here that in 1900, 19% of the nearly 700 households were headed by widows; that figure had dropped to 11% in 1900.)

Consistently, "two-headed" households were the largest at

White Earth, contained the largest numbers of children, and were the source of the largest number of dependent categories. Two-headed households were clearly the "norm." In 1910, 83% of all White Earth households were headed by a married couple. Thus, while one should worry about the extent to which the census itself might skew the data towards a Euro-American norm, it seems clear that the Ojibwas at White Earth maintained nuclear households that expanded to incorporate other relatives during times of crisis. This impression is confirmed when one also notes that vertically extended households were far more frequent than laterally extended ones. All extended households show a strong patrilineal bias.

Within this White Earth "norm," there were several significant variations. Most significant at an agency with so much exogamy, households headed by whites or "mixed-bloods" were larger than those headed by Indians. These "white" and "mixed" households also contained the lowest range of dependent categories, while their "Indian" counterparts were consistently smaller, more extended, and contained a wider array of dependents. The picture here, then, is of two extremes--white and full blood--with a growing pattern in between them. Despite its intermediate position, however, the mixed category suggested that in the future families at White Earth would be largely nuclear and would contain far more children than extended kin.

The variations based on race were largely repeated in occupational categories, with occupations most closely associated

with the outside world being associated with larger households, larger percentages of children and relatively few categories of dependents. For example, in 1900, the relatively prosperous category of "proprietors" was the smallest occupational group but it had the largest households. Alternatively, in 1910 households headed by people engaged in "native economic activities" were the smallest of any of the occupational subgroups. (Interestingly, households headed by people receiving rations, the source of many a congressional speech on lazy, aggrandizing tribesmen, were consistently smaller than those that were self-sufficient.)

Households in movable dwellings, recorded only in 1900, were also much smaller than the tribal mean (1.67 vs 4.25). These also contained much older members and were headed exclusively by illiterate Indians.

Taken together, then, it would seem that a number of factors associated with the outside world--exogamy, cash, "fixed" dwellings and education--produced large, nuclear families in which children represented nearly a half of all members. Alternately, small, vertically-extended groups of nonexogamous tribal members made up a group of "traditional" households. These different modes could well lie behind the frequently discussed factionalism at the White Earth agency.

Each of the censuses revealed significant differences in the household structure of the different White Earth bands. One has the impression however, that, over time, band differences were less important than differences based on exogamy, education and

occupation. The Pembina band, for example, lived only in "fixed" dwellings in 1900, but since this was true for 98% of the White Earth households, it is difficult to imagine that the larger-than-expected number of movable dwellings among the Removed Mille Lacs band (Number?) was due to cultural factors. Supporting this judgement with evidence will require additional research. For the present, social factors seem to be of overwhelming importance in understanding the household structure at White Earth.

White Earth Households
1885-1930*

	1885	1900	1910	1930
Population	1736	2928	3390	8582
Households	591	688	693	2638
Mean Size	2.93	4.25	4.9	1.86
% Single Person Households	0.32	10.0	5.0	85.0
% 2-Person Households	0.22	0.20	15.0	21.0
% Households w/ Child<16	32.2	32.2	34.8	15.4
% Households w/ Child<5	11.1	15.1	11.6	4.7
% Movable		2.0	0.0	--
% Single Head	59.0	36.0	17.0	89.0
% Affinal			1.0	
% Extended	--	11.0	17.0	--

*The 1930 enumeration data is included here but questions about that census caused us to ignore it when discussing household life at White Earth.

III. Comparisons Between Tribes

Marked differences in both size and composition of households appeared in the data accumulated for this project. For the period under study, Colville and Crow have the smallest families, while Hopi and Creek have the largest. Some of this difference in size reflects the numbers of children in the households. Colville consistently has proportionately fewer children per household than the others, as do the Crows for every year except 1886. The Hopi and Creek have half again as many children in the household as do the two former tribes. Inclusion of additional relatives, however, increases the differences. About twenty to twenty-five percent of persons in Creek and Hopi households are other than parents or children, as opposed to fifteen percent or less for the other tribes.

Among the Hopi and the Creeks, a quarter to a third of all families are extended, but fewer than a fifth are extended among the other three tribes. Among the Crow, Colville, and White Earth, nuclear families seem to be the norm. Among all of these groups, however, kinship obligations lead to the inclusion of others. Most of these other dependents are either younger, single, and childless ("orphans") or older and widowed. At Colville, extended families also seem to develop through the accretion of subnuclear families -- that is a widowed mother

joined by her widowed or separated daughter or sister.

Among the Creek and Hopi, extended families show a developmental pattern and reflect a distinctive cultural norm. The Creek are unique in that siblings, particularly sisters, often form joint households. Multigenerational stem families occur somewhat less often there. Among the Hopi, three-generation stem families are preferred, but joint families also occur. Both of these tribes also incorporate other, unmarried and childless relatives, who are often male, as well.

Household size increases over time for all groups except Crow and Creek. This reflects both increasing portions of children within each household unit and more inclusion of other relatives. The percentage of extended families rises among all of the tribes as household size increases. The proportion of children per household increases in these groups as well. Nevertheless, for every reservation except for Hopi, these extended households reflect the older pattern of incorporating isolated "widows" and "orphans" into the household.

Among the Hopi and the Creek, there is strong evidence for a continuing pattern of matrilocal residence. Other than children, most dependents are related to the women in these households. Likewise, children-in-law and siblings-in-law tend to be male. Households in both tribes also include unmarried male siblings.

The other tribes demonstrate a marked patrilocal preference. In these cases most relatives are related to men in the household. Among the Crow there is also a marked preference to

include male rather than female siblings in the household, though mothers and grandmothers are more common than fathers and grandfathers. At Colville, males dominate all categories of resident relatives other than spouses and children.

IV. Conclusions

1. All of the tribes show both a marked conservatism in household structure and a striking degree of flexibility. The strongly agricultural Hopi and Creek both maintained relatively large households, which tended toward cyclical extension. The hunting and gathering Crow and Colville had smaller, mostly nuclear households. At White Earth, which was shifting from hunting and gathering to agriculture and wage labor, families were larger, but primarily nuclear. Residence patterns, matrilocal among the Hopi and Creek and patrilocal elsewhere, remained constant throughout the period under study.

2. Social and economic factors arising from reservation life and interaction with the dominant American society had the greatest impact on family life among all five tribes. Internal subdivisions differed significantly in household structure, but this difference declined over time, except at Hopi. Inter-marriage and involvement in Euro-American society produced increasingly significant differences in household structure. Among all groups, households with "full-blood" heads were

smaller, more likely to be extended, and contained a greater diversity of relatives. Those with white heads were larger, but more strongly nuclear. "Mixed-bloods" headed households intermediate in size and composition, but often closer to the white than the Indian model. "Mixed-blood" extended families tended to include only close kin and unmarried siblings. Differences in household size between Indian and white or "mixed-blood" households clearly reflect the greater fertility of the latter, which contain more children and fewer kinds of relatives. Education and economic factors, such as occupation, produce similar, but more pronounced results.

3. Except among the Crow and Creek, households came to include more relatives, generally single and childless, and to have more children. Clearly the shift from subsistence economies to wage labor and capitalist agriculture affected households. Some of the increasing inclusion of other relatives may reflect the declining marriage rates mentioned in the previous volume. Likewise, new economic conditions and increasing economic distress may have called for novel and flexible housing arrangements.

At Crow the households became markedly more nuclear over time. Why Crow should differ in this regard is not clear, but may reflect economic conditions on this reservation.

NUMBER 9

REPORTS OF THE AMERICAN INDIAN FAMILY HISTORY PROJECT
Part 2: MARRIAGE; Part 3: HOUSEHOLDS; Part 4: FERTILITY
Richard A. Sattler, Frederick E. Hoxie

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REPORTS OF THE AMERICAN INDIAN FAMILY HISTORY PROJECT

by

Richard A. Sattler

Frederick E. Hoxie

PART FOUR: FERTILITY

1992

TABLE OF CONTENTS

I. Introduction	1
A. Measures of Fertility	1
B. Intra-Group Variability	5
C. Diachronic Variability	7
II. Profiles of Tribal Fertility	9
A. Colville	9
B. Creek	25
C. Crow	38
D. Hopi	49
E. White Earth	60
III. Comparisons Between Tribes	76
IV. Conclusions	86

I. INTRODUCTION

In examining fertility among the five groups under study, we analyzed several different measures of fertility or practices and patterns affecting fertility. We also looked at the internal patterning of variability and change through time on each of these measures within each group. Finally we compared the five groups to determine similarities and differences among them. This report begins with a description of the fertility measures used in the study.

A. Measures of Fertility.

We used three general measures of fertility for women and five more limited and specific measures. The general measures used included the child/woman ratio, age-specific fertility rates by five-year cohort, and completed fertility. The other measures consisted of children born and alive, age at first and last birth, birth-spacing, and rates of survivorship of children.

Child/Woman Ratio. The child/woman ratio derives from dividing the number of own children under five per household by the number of women between the ages of 15 and 49 inclusive. This measure was available on all censuses.

Age-Specific Fertility. We developed four separate measures of age specific fertility by five-year cohort. The first of these is the total number of own children per household. The second is the number of own children under five years per household. The third is the number of children born per woman and the final measure is the number of children alive per woman. These last two measures are available only on the 1900 and 1910 censuses, while the first two are available on all censuses. All of these measures are subject to a degree of systematic error, though measures using children born or children alive should be more accurate.

Completed Fertility. Completed fertility, that is the total number of children a woman has during her reproductive career, can be estimated from our data by three different measures. The first uses the number of own children per household and derives the estimate from the highest mean number of children. The second uses the highest mean number of children born for women aged 35 to 55 and directly measures total completed fertility. The third measure uses the highest mean number of children alive for women of the same age group and directly measures effective fertility, that is total number of surviving children per woman.

Children Born and Alive. Women differ at all ages in both total and effective fertility. Variation in both number of children born and children alive per woman affect overall rates of fertility. Additionally comparison of both measures reveals cultural preferences and practices in terms of family planning and composition. Unfortunately these data are available on only the 1900 and 1910 Federal Censuses. We estimated the number of children alive for the 1885 and 1930 censuses using total own children in the household. While this is a less accurate measure, the proportion of living children not in the home should be small. Additionally, there is evidence that both the number of children born and those alive are probably under reported, particularly for older women.

First and Last Birth. Age at birth of first and last children were derived by subtracting the ages of the oldest and youngest own children in the household from the age of their mother. To minimize systematic error, only women ages 15-35 were used to compute mean age at first birth, while only women aged 45-55 were used to compute mean age at last birth. These ages bracket the period of a woman's effective fertility and, along with birthspacing, define the limits of potential children born.

Children Born and Alive. Women differ at all ages in both total and effective fertility. Variation in both number of children born and children alive per woman affect overall rates of fertility. Additionally comparison of both measures reveals cultural preferences and practices in terms of family planning and composition. Unfortunately, these data are available on only the 1900 and 1910 Federal Censuses. Additionally, there is evidence that both the number of children born and those alive are probably under reported, particularly for older women.

Children per Household. The number of own children per household represents a similar, but less accurate measure of fertility. Since a woman's children may not all live in the same household, because of maturation or other processes, this measure is less reliable and accurate than the preceding measures. It is, however, available on all censuses in our data set and provides an estimate of fertility. We have used it in discussions of internal variability as an approximation of children alive for 1885 and 1930.

Survivorship of Children. The final factor affecting overall patterns of fertility is rates of survival of children. This is taken to be the percentage of children born who are alive (CHALIVE/CHBORN) at the time of the census. Rates of

survivorship are undoubtedly inflated for all groups, since women are more likely to report living children than those who are deceased. We could only compute survivorship for 1900 and 1910.

B. Intra-Group Variability

In addition to overall patterns of fertility, we also examined the patterning of internal variation. We analyzed the effects of several different factors on patterning variation in fertility patterns. These factors may be grouped to two loose categories. The first includes primarily social and demographic characteristics of the women, while the second includes primarily their sociocultural and socioeconomic characteristics. Under social and demographic factors we listed personal characteristics, marital characteristics, and familial and household characteristics for both natal and current households/families.

Personal Characteristics. Age and sex constituted the primary personal characteristics examined here. Other features, such as blood quantum or tribe arguably might belong here, but we have listed them elsewhere.

Marital Characteristics. Under marital characteristics, we included marital status, age at marriage, spouse's age, and

difference in age between spouses on all censuses. For 1900 and 1910, we added the number of years married and whether the marriage was exogamous. We also included the number of marriages for 1910 only. Because so few people were reported as polygynous (polygamous on the census), this variable was dropped from consideration.

Parental Characteristics. We also examined the effects on fertility of several characteristics of the women's parents or their natal households. These included degree of Indian, White, or Black blood on all censuses except 1885, as well as the tribe of each parent and whether the parents were exogamous in 1900 and 1910.

Familial/Household Characteristics. Several characteristics of the women's current household also figured in this analysis. We included family size for all censuses, and added type of dwelling, number of families in the dwelling, and family structure (not extended; extended vertically, laterally, or both; containing unrelated persons) for 1900 and 1910 censuses. We also ran cross correlations on all fertility measures to determine interrelations among them.

Economic Characteristics. Economic data were available on only the 1900 and 1910 censuses. These variables included own and spouse's occupation, whether the person had accepted

government rations during the last year, whether they owned or rented their home, whether or not the home was mortgaged, and whether or not it was a farm home. Employment status, whether the person owned the property they lived on, and whether or not they were taxed provided additional variables in 1910.

Social Characteristics. Social characteristics considered include tribe, band, or other subgroup on all censuses, and residence on all censuses except 1885. Spouse's tribe was also considered for 1900 and 1910.

Cultural Characteristics. Cultural characteristics included nametype (native or European influenced) for all censuses except 1930, as well as language spoken (or ability to speak English), literacy, school attendance and/or graduation, and spouse's language for 1900 and 1910.

C. Diachronic Variability

In addition to the synchronic patterning of variation described above, we examined diachronic change in fertility patterns for each tribe. This included changes in both overall rates and practices and in the patterning of variability. An additional consideration was the extent to which the degree of

variability in the populations change through time.

D. Intergroup Variability

The final consideration in this analysis is a comparison among the different groups. We compared overall rates and patterns; extent, nature, and patterning of synchronic variability; and trends in temporal change among all groups.

II. Profiles of Tribal Fertility

FEATURE	YEAR	MEAN	STD	N
CH/WOMAN RATIO	1885	282.9	---	410
	1900	212.7	---	315
	1910	557.5	---	339
	1930	333.8	---	683
CHILD BORN	1900	1.64	1.58	213
	1910	3.30	2.58	213
CHILD ALIVE	1885	1.06	1.30	410
	1900	1.29	1.38	213
	1910	2.29	1.93	214
	1930	1.35	1.93	644
FIRST BIRTH	1885	19.83	4.21	136
	1900	21.39	4.54	78
	1910	20.10	4.73	120
	1930	19.98	3.42	181
LAST BIRTH	1885	31.62	7.37	91
	1900	32.91	6.67	58
	1910	33.66	7.93	58
	1930	35.25	5.38	100
BIRTHSPACE	1885	4.03	2.59	119
	1900	4.23	3.06	74
	1910	3.99	2.52	144
	1930	3.36	2.20	224
SURVIVORSHIP	1900	.808	.325	143
	1910	.762	.332	188

Table 1. Overall Fertility
COLVILLE, 1885-1930

A. Colville

The statistics for overall fertility patterns among the Colville can be seen in Tables 1-3. The child/woman ratio varied considerably between 1885 and 1930, from a low of 212.7 in 1900

CHRT	1885		1900		1910		1930	
	RATIO	WOM	RATIO	WOM	RATIO	WOM	RATIO	WOM
0-4	0	58	0	37	0	99	0	142
5-9	0	73	0	67	0	86	0	185
10-14	0	61	0	52	0	68	0	168
15-19	39	52	67	30	143	63	22	185
20-24	448	68	213	47	959	49	422	128
25-29	449	69	340	47	889	45	753	89
30-34	333	63	388	49	818	45	372	86
35-39	280	50	286	42	677	65	500	76
40-44	157	83	113	62	256	39	408	71
45-49	185	27	26	38	91	33	83	48
50-54	85	47	100	40	129	33	18	56
55-59	0	9	0	30	0	30	20	50
60-64	0	22	0	18	0	24	36	55
65-69	0	1	0	30	0	28	0	37
70+	0	4	0	9	0	39	0	42

Table 2. Child/Woman Ratio by Cohort
COLVILLE

to a high of 557.5 in 1910 (see Table 1). The other measures summarized in Table 1 confirm this picture of a low, but rising, rate of fertility accentuated by a surge in 1910. (This "surge" should be viewed skeptically because of the errors contained in the 1910 enumeration.) Children born, a measure of completed fertility, more than doubled between 1900 and 1910, while the number of children per household also rose and birth spacing dropped.

Tables 2 and 3, Child/Woman Ratio and Children Born, describe in greater detail the sources of the rise in Colville fertility. Table 3, Children Born, indicates a completed fertility of 2.65 children per woman in 1900, a figure that rose to 3.8 in 1910. These numbers reinforce the indication of rising fertility in Table 1 and indicate that childbearing began in a

CHRT	TOTAL	1900 RATIO	WOMEN	TOTAL	1910 RATIO	WOMEN
0-4	0	0.00	37	0	0.00	99
5-9	0	0.00	67	0	0.00	86
10-14	0	0.00	52	0	0.00	68
15-19	3	0.10	30	16	0.25	63
20-24	16	0.34	47	68	1.39	49
25-29	49	1.04	47	100	2.22	45
30-34	73	1.49	49	128	2.84	45
35-39	76	1.81	42	247	3.80	65
40-44	114	1.84	62	117	3.00	39
45-49	76	2.00	38	118	3.58	33
50-54	106	2.65	40	79	2.39	33
55-59	42	1.40	30	73	2.43	30
60-64	18	1.00	18	49	2.72	24
65-69	38	0.90	30	76	2.71	28
70+	9	1.00	9	117	3.00	39

Table 3. Children Born by Cohort
COLVILLE

woman's twenties and lasted until about fifty. Despite this continuity, however, Table 2 shows that Colville women remained fertile longer in 1910 and 1930 than they had been in 1885 and 1900. The 1930 enumeration showed women in most of the age cohorts from age 35 upward reporting more children than their counterparts in earlier census years. For women from 40 to 44, for example, the ratio of children per woman rose more than 150% between 1885 and 1930, and for this same cohort the number of children ever born nearly doubled between 1900 and 1910 (See Table 3).

Internal Variation

We examined the extent to which a variety of factors patterned variation on each of the measures of fertility. This

VARIABLE	CHILD BORN	CHILD LIVE	FIRST BRTH	LAST BRTH	BIRTH SPC	% SURV	CH/W RATIO
<hr/>							
			-1885-				
CH ALIVE	-	\		X		-	X
FIRSTCH	-		\	X	X	-	
LASTCH	-	X	X	\		-	
BSPACE	-		X		\	-	
CH/W RATIO	-	X				-	\
AGE	-	X	X	X		-	X
SPAGE	-		X	X		-	X
MSTAT	-		X			-	
MARAGE	-		\	X	X	-	
FAMSIZE	-	X		X	X	-	X
BAND	-	X	X	X	X	-	X
			-1900-				
CHBORN	\	X		X		X	
CHLIVE	X	\		X	X	X	
FIRSTCH			\	X			
LASTCH	X	X	X	\	X		
BSPACE		X		X	\		
%SURVCH	X	X				\	
CH/W RATIO							\
AGE	X	X	X	X	X	X	
SPAGE		X	X	X		X	
MSTAT						X	X
MARAGE			X	X			
YRSMAR	X	X		X	X	X	
FAMSIZE	X	X		X	X		
DWELLTYPE	X	X					
TRIBE		X	X	X		X	
SPTRIBE		X	X	X		X	X
LOCALITY		X				X	
SPSPEAK		X				X	
NAMETYPE			X				

Table 4. Variables Affecting Fertility in Women 15-45.
COLVILLE, 1885-1900

analysis examined the interrelationships of the fertility variables, as well as the effects of sociodemographic factors, indigenous social organization, economic activities, educational attainment, intermarriage, and locality on fertility. Sociodemographic factors included such variables as age, marital

VARIABLE	CHILD BORN	CHILD LIVE	FIRST BRTH	LAST BRTH	BIRTH SPC	% SURV	CH/W RATIO
<hr/>							
			1910				
CHBORN	\	X		X		X	X
CHLIVE	X	\		X	X	X	
FIRSTCH			\	X			
LASTCH	X	X	X	\			
BSPACE		X			\		
%SURVCH	X	X				\	X
CH/W RATIO	X						X \
AGE	X	X	X	X			X
SPAGE	X	X		X			
MSTAT		X			X		X
MARAGE			X	X			
AGEDIF			X	X			
YRSMAR	X	X		X			X
NUMAR							X
FAMSIZE	X	X		X	X	X	
TRIBE			X	X	X	X	
SPTRIBE			X	X		X	
WBLOOD		X	X		X	X	X
PAREXOGAMY			X				
GEN.EXOG.							X
LOCALITY		*	X	*	X	X	X
OCCUPATION						X	X
SPOCCUPAT			X	X	(X)	X	
FARM						X	X
RESIDE	X					X	
TAXED							X
LITERATE			X	X		X	
NAMETYPE			X			X	
<hr/>							
			1930				
CH ALIVE	-	\		X	X	-	X
FIRSTCH	-		\	X		-	X
LASTCH	-	X	X	\	X	-	
BSPACE	-	X		X	\	-	X
CH/W RATIO	-	X	X		X	-	\
AGE	-	X	X	X	X	-	
SPAGE	-	X	X	X	X	-	X
MSTAT	-	X	X	X	X	-	X
MARAGE	-			X		-	X
AGEDIF	-		X			-	
FAMSIZE	-	X		X	X	-	X
IBLOOD	-			X	X	-	X

Table 5. Variables Affecting Fertility in Women 15-45.
COLVILLE, 1910-1930

status, and years married. Consideration of indigenous social organization was limited to sociopolitical divisions such as tribe, band, and village. Economic activities included own and spouse's occupations, home ownership, acceptance of rations, etc. Educational attainment was reflected in school attendance or graduation, ability to speak English, and literacy.

Intermarriage was reflected by personal and parental exogamy, as well as by blood quantum. Tables 4 and 5 show which factors had a socially and statistically significant effect on fertility.

Analysis of sociodemographic variables (Table 7), including cross-correlations among fertility variables (Table 6), largely produced predictable results reflecting total numbers of children, the passage of time, and marital status (see Tables 6 and 7). That is married women, older women, those who were married longest, and those who had the shortest birthspacing and highest survivorship had the most children.

More interesting are the negative correlations, shown in Table 6, between children born and survival rate and between age at first birth and birthspacing, as well as the positive correlation between age at last birth and birthspacing. These results indicate that women who experienced high infant mortality (low survivorship) compensated by have more children than usual. Also, women who had children early had them at longer intervals and that longer birth intervals increased a woman's period of active fertility. Such results indicate an effort by women to regulate family size and suggest the existence of a cultural

VARIABLE	CHILD BORN	CHILD LIVE	FIRST BRTH	LAST BRTH	BIRTH SPC	% SURV	CH/W RATIO
<hr/>							
1885							
CH ALIVE	-	1.000					
FIRSTCH	-		1.000				
LASTCH	-	.489	.692	1.000			
BSPACE	-		-.288		1.000		
CH/W RATIO	-	.282				-	1.000
<hr/>							
1900							
CHBORN	1.000						
CHLIVE	.768	1.000					
FIRSTCH			1.000				
LASTCH	.502	.442	.683	1.000			
BSPACE		-.241		.332	1.000		
%SURVCH	-.293	.334				1.000	
<hr/>							
1910							
CHBORN	1.000						
CHLIVE	.694	1.000					
FIRSTCH			1.000				
LASTCH	.504	.591	.589	1.000			
BSPACE		-.311			1.000		
%SURVCH	-.431	-.302				1.000	
CH/W RATIO	-.311					.313	1.000
<hr/>							
1930							
CH ALIVE	-	1.000					
FIRSTCH	-		1.000				
LASTCH	-	.570	.643	1.000			
BSPACE	-	-.266		.316	1.000		
CH/W RATIO	-	.288	-.252		-.239	-	1.000

Table 6. Cross-Correlations Among Fertility Variables
COLVILLE, 1885-1930

ideal for numbers of children. The positive correlation between birthspacing and number of children alive, but no correlation to children born provides additional support for this hypothesis. That is, women increased the time between births when more of their children survived.

The correlation between ages at first and last births in Table 6 is more problematic. It is not clear why women who begin child bearing late should continue longer than women who

VARIABLE	CHILD BORN	CHILD LIVE	FIRST BRTH	LAST BRTH	BIRTH SPC	% SURV	CH/W RATIO
<hr/>							
1885							
AGE	-	.277	.649	.803		-	-.401
SPAGE	-		.318	.482		-	-.268
MARAGE	-		1.000	.692	-.288	-	
FAMSIZE	-	.915		.526	-.189	-	.244
<hr/>							
1900							
AGE	.424	.307	.550	.784	.252		-.446
SPAGE		.242	.319	.448			-.375
MARAGE			.480	.260			
YRSMAR	.464	.324		.564	.290		-.491
FAMSIZE	.680	.784		.249	-.242		
MAR. STATUS*							
Married- Present	-					.778	294.7
Married- Absent	-					.800	500.0
Widowed	-					.981	170.2
Single	-					---	00.00
<hr/>							
1910							
AGE	.612	.590	.504	.819			-.513
SPAGE	.395	.501		.410			-.402
MARAGE			.468	.394			
AGEDIF			.409	.325			
YRSMAR	.616	.652		.446			-.398
NUMAR						-.426	
FAMSIZE	.392	.749		.494	-.300	.416	
MAR. STATUS*							
Married- Present	-	2.17			4.03		644.4
Married- Absent	-	3.22			2.39		1036.0
Widowed	-	2.48			5.19		552.6
Divorced	-	2.00			3.75		1000.0
Single	-	1.00			--		32.8
<hr/>							
1930							
AGE	-	.375	.644	.855	.297	-	-.491
SPAGE	-	.348	.246	.529	.236	-	-.270
MARAGE	-			.643		-	-.252
AGEDIF	-		.252			-	
FAMSIZE	-	.987		.554	-.256	-	.317
MAR. STATUS*							
Married (Present)	-	2.52		36.29	3.48	-	668.6
Married (Absent)	-	1.95		33.61	2.93	-	449.8
Widowed	-	2.36		34.83	4.86	-	181.8
Single	-	0.12		47.00	4.07	-	45.1

Table 7. Sociodemographic Factors Affecting Fertility,
Colville, 1885-1930

begin early, except that such counterintuitive behavior might reinforce the inference of a culturally mandated "ideal" family.

Other correlations show some interesting patterns.

Correlations seen in Table 7 between age, spouse's age, years married and birthspacing are not immediately explainable, as there is no clear reason why older women, and those with older spouses or who have been married longer, should have longer intervals between births. This may reflect the cumulative effects of infant and juvenile mortality over time, however, rather than real differences in fertility related behavior.

In an effort to control for the effects of age and other durational attributes, two smaller samples, consisting of women aged 10-35 and women aged 40-50, were also analyzed. With a few exceptions, these analyses produced similar results to the larger sample. Among the younger group of women, correlations with survivorship, except for overall numbers of children, disappear, perhaps reflecting fewer opportunities for infant and juvenile mortality among young women. Among the older group, the correlations between age and birthspacing in 1885 and between marriage age (a direct function of age at first birth for 1885 and 1930) and age at last birth in 1885 and 1930 appear as in the larger sample. This lends some credibility to the hypotheses that a cultural "ideal" existed in each community.

Indigenous social divisions (tribe in the case of Colville) played a significant role in patterning variability in fertility prior to 1910. As can be seen in Table 8, the tribes at Colville

VARIABLE	CHILD BORN	CHILD LIVE	FIRST BRTH	LAST BRTH	BIRTH SPC	% SURV	CH/W RATIO
<hr/>							
1885							
BAND							
Couer de Alenes	-	0.83	20.58	31.88	2.65	-	76.3
Calispel	-	1.28	18.23	29.86	4.94	-	375.0
Lake	-	1.50	22.48	36.11	3.33	-	656.7
Deep Creek	-	0.84	22.86	26.00	4.03	-	421.1
Spokane							
Lower	-	1.23	17.38	28.38	4.82	-	284.3
Spokane							
Nez Perces	-	0.63	19.57	31.80	6.38	-	196.1
<hr/>							
1900							
TRIBE							
Palouse					7.11		
NezPerce		1.07	23.91		4.17	.808	
Colville		1.65	21.05		3.37	.914	
Columbia		1.31	20.13		3.63	.833	
Okanagan		0.89	21.00		4.76	.569	
Sanpoil		1.37	25.60		3.90	.882	
Nespelem		1.22	---		---	.733	
SP. TRIBE							
Nez Perce		1.08	24.00			.786	240.0
Colville		1.67	21.33			.897	454.6
Columbia		1.18	19.88			.797	269.2
Okanagan		0.56	21.00			.449	156.3
Sanpoil		1.36	---			.861	280.0
Nespelem		1.57	---			.733	125.0

Table 8. Effects of Internal Divisions on Fertility,
Colville, 1885-1900

differed significantly in regard to most aspects of fertility. Because of the changes in tribal composition between 1885 and 1900, it is not possible to make meaningful comparisons. It is noteworthy that the child/woman ratios and mean numbers of children alive clearly reflect cultural practices, such as birthspacing, or demographic factors like survivorship. The consistently low number of living children for Nez Perce women obviously reflects a longer than usual interval between births.

VARIABLE	CHILD BORN	CHILD LIVE*	FIRST BRTH	LAST BRTH	BIRTH SPC	% SURV	CH/W RATIO
<hr/>							
	1900						
DWELL TYPE							
Fixed	1.81	1.41					
Movable	1.26	1.00					
	1910						
OCCUPATION							
None	2.97						507.7
Farmer/ Rancher	4.24						116.7
Wage Labor	3.60						375.0
SP. OCCUP.							
None	2.52				3.78		
Farmer/ Rancher	4.11				4.45		
Wage Labor	2.84				2.63		
FARM							
Yes	4.90						1044.0
No	2.93						533.3
RESIDE							
Yes	4.33						
No	2.46						
TAXED							
Yes							117.6
No							576.5

Table 9. Effects of Economic Variables on Fertility,
Colville, 1900-1910

The marked difference between the Lake and Okanogan Indians is also noteworthy. These are distinct, but related groups, representing the Lake Okanogan and River Okanogan Indians respectively.

Economic factors also affected fertility in 1900 and 1910, as can be seen in Table 9. The most marked distinctions lies between those women following traditional economic activities and those engaged in "civilized" pursuits, principally farming and wage labor. The effects of spouses' economic pursuits are

VARIABLE	CHILD BORN	CHILD LIVE*	FIRST BRTH	LAST BRTH	BIRTH SPC	% SURV	CH/W RATIO
-----1900-----							
SP. SPEAK							
Yes		1.80					461.5
No		1.74					259.7

Table 10. Effects of Educational attainment on Fertility,
Colville, 1900

similar. In 1900, those in movable dwellings (following traditional subsistence patterns) had the fewest children, while those in fixed dwellings (more likely to farm) had the most. This pattern is replicated in 1910, with farmers having more children than those who were unemployed. The latter likely engaged in a foraging subsistence economy. Wage laborers or women married to wage laborers were in between the others. What is striking here is that women married to farmers also had a longer birth interval than the others, which should lead to fewer not more children. This suggests that there are other, unseen factors at work.

The only educational variable to show much effect on fertility was the language of the spouse (see Table 10). Women whose husbands spoke English in 1900 had more children than those whose husbands could not. This may reflect the effects of intermarriage discussed below. While literacy affected fertility, the number of literate women was small and the effects seem mostly a function of age. Literate women were uniformly younger.

VARIABLE	CHILD BORN	CHILD LIVE*	FIRST BRTH	LAST BRTH	BIRTH SPC	% SURV	CH/W RATIO
<hr/>							
1910							
WBLOOD							
None		2.07			4.29		487.8
Mixed		2.64			3.24		657.4
GENERATIONS							
EXOGAMY							
None							575.5
One							869.6
Two							480.0
<hr/>							
1930							
IBLOOD							
Mixed					3.00		282.5
Full					3.76		406.4

Table 11. Effects of Intermarriage on Fertility,
Colville, 1900

Intermarriage affected fertility to an increasing extent, as can be seen in Table 11. Prior to 1930, "full-blood" women normally had fewer children than "mixed-blood" women. In large part this reflects the shorter birth interval for the latter. Likewise, women whose parents were exogamous or were exogamous themselves had more children than other women. Interestingly, those who were exogamous and had exogamous parents had the lowest child/woman ratio, but this may reflect the generally younger age of such women. In 1930, this situation reversed, with "full-blood" women having more children than "mixed-blood" women. This is intriguing, since "full-bloods" still have a longer interval between births.

Differences in fertility appeared between localities as well, as shown in Table 12. Because the designated localities differ on the 1900 and 1910 censuses, however, easy comparisons

VARIABLE	CHILD BORN	CHILD LIVE*	FIRST BRTH	LAST BRTH	BIRTH SPC	% SURV	CH/W RATIO
<hr/>							
1900							
LOCALITY							
a		1.54				.901	
b		1.13				.757	
<hr/>							
1910							
LOCALITY							
Republic	5.00				4.44		142.9
Danville	5.67				3.53		285.7
Keller	2.26				3.54		486.5
Meteor	2.25				3.45		571.4
Molson	4.00				15.00		142.9
Aeneas	3.00				6.00		375.0
Okanagan	3.79				3.93		880.0
Nespelem	3.56				4.56		572.8

Table 12. Effects of Locality on Fertility,
Colville, 1900

are not possible. As was mentioned in the previous volume on marriage, variability by location probably reflects the interactions of the previously discussed factors, many of which were localized in their effects.

Temporal Change

Reviewing these data, it appears that not only did the Indians on the Colville reservation vary synchronically in regard to fertility patterns, but they also underwent significant changes through time. These changes include both overall rates and the patterning of variation.

Changes through time in the overall rates can be seen in Table 1. The child/woman ratio fluctuates widely through time, but without any clear trend. Significant trends do appear,

however, for other measures. The number of children born, children alive and age at birth of last child all increase through time, while birthspacing declines after an initial increase in 1900. Rates of survival also decline slightly between 1900 and 1910. Age at first birth rises by a year and a half in 1900, but then returns to near its original level by 1910. This clearly fueled the transition from a declining population regime in the late nineteenth century to the population increase which characterizes the twentieth century.

As can be seen in Table 1, overall variability increases as well for children born and children alive, as it does for children per household and survivorship. Variability in age at first birth also increases slightly until 1910, after which it declines sharply. Variability on other features either remains relatively constant or fluctuates widely from census to census.

The patterning of variability also changes through time. In the two earlier censuses, tribe and spouse's tribe, along with general demographic factors, dominate, while locality of residence and acceptance of Euro-American cultural traits (ability to speak English and English names) play only minor roles. The importance of tribe diminishes somewhat by 1910 as other social factors such as patterns of exogamy (parental exogamy and generations of exogamy) and degree of white blood emerge as significant. Economic variables also begin to influence fertility patterns at this time. Other factors, such as locality and adoption of Euro-American cultural traits

increase in importance at this time as well.

Overall, certain features stand out in regard to Colville fertility patterns. Most important among these is evidence of cultural control over fertility and family size. This appears in measures of birthspacing (which remains largely constant) and the relatively low child/woman ratios that indicate a curtailing of fertility. The enduring and pervasive importance of tribal differences in patterning fertility practices stands out as well.

Despite overall low rates of fertility, several factors mediated to increase fertility. Tribal affiliation or husband's tribe certainly affected this. The Colville consistently had more children than the other tribes on the reservation (and higher survival rates) while the Okanagan had the lowest birth and survival rates. Intermarriage with whites and/or adoption of Euro-American economic or cultural traits generally accompanied changes in fertility patterns which produced more children. In 1930, however, this situation seems to have been reversed, with full Indians having more children than mixed-bloods.

VARIABLE	VALUE	MEAN	STD	N
CH/WOMAN RATIO	1900	486.2	---	1485
	1910	607.7	---	520
CHILD BORN	1900	3.22	2.85	955
	1910	3.27	2.78	326
CHILD ALIVE	1900	2.18	2.06	951
	1910	2.42	2.13	317
CHILD/HSOLD	1900	1.34	1.86	1428
	1910	1.54	1.90	502
FIRST BIRTH	1900	19.77	4.07	531
	1910	19.97	4.93	214
LAST BIRTH	1900	34.97	7.00	240
	1910	35.60	5.84	65
BIRTHSPACE	1900	3.59	2.56	478
	1910	3.77	2.91	198
SURVIVORSHIP	1900	.731	.326	814
	1910	.772	.288	274

Table 13. Overall Fertility
CREEK, 1900-1910

B. CREEK

The overall fertility statistics for the Creeks are shown in Tables 13-15. The child/woman ratio rose from 486.2 in 1900 to 607.7 in 1910. The average woman between 15 and 45 in 1900 gave birth to 3.22 children, of whom 2.18 were alive and 1.34 lived at home. She had her first child at 19.77 years and her last at 34.97 years with 3.59 years between each birth. On average, 73.1% of her children survived.

The figures for 1910 are similar, but reflect a general rise in fertility. In 1910, Creek women had a mean of 3.27 children

CHRT	1900		1910	
	RATIO	WOMEN	RATIO	WOMEN
0-4	0	435	0	162
5-9	0	461	0	165
10-14	0	431	0	104
15-19	118	389	154	117
20-24	602	349	673	104
25-29	909	241	849	93
30-34	781	146	843	70
35-39	579	121	829	76
40-44	362	130	618	34
45-49	147	109	231	26
50-54	85	94	31	32
55-59	23	43	0	11
60-64	27	37	0	16
65-69	0	16	0	10
70+	0	7	0	5

Table 14. Child/Woman Ratio by Cohort
CREEK

CHRT	TOTAL	1900		TOTAL	1910	
		RATIO	WOMEN		RATIO	WOMEN
0-4	0	0.00	435	0	0.00	162
5-9	0	0.00	461	0	0.00	165
10-14	0	0.00	431	0	0.00	104
15-19	69	0.18	389	17	0.15	117
20-24	407	1.17	349	117	1.13	104
25-29	608	2.52	241	226	2.43	93
30-34	516	3.53	146	180	2.57	70
35-39	564	4.66	121	317	4.17	76
40-44	628	4.83	130	154	4.53	34
45-49	621	5.70	109	167	6.42	26
50-54	602	6.40	94	132	4.13	32
55-59	284	6.60	43	72	6.55	11
60-64	179	4.84	37	62	3.88	16
65-69	78	4.88	16	55	5.50	10
70+	35	5.00	7	27	5.40	5

Table 15. Children Born by Cohort
CREEK

born, 2.42 children alive, and 1.54 children at home. The mean age at first birth was 19.97 years and 35.6 years at last birth, with a mean of 3.77 years between births. The mean survival rate for children was 77.2%.

No women under age 15 are listed as having any children on any of the age-specific measures of fertility for either census. The child/woman ratio peaks at the 25-29 year cohort on both censuses, with a ratio of 909 in 1900 and 849 in 1910. The ratio returns to zero after 64 in 1900 and after 54 in 1910.

The mean number of children per household rises above zero with the 15-19 age cohort and exceeds .50 in the next cohort reaching 1.00 or better in the 25-29 cohort after that on both censuses. The means for 1900 peak in the 40-44 cohort (2.86 children) and then slowly decline to below 1.00 by age 70. The mean number of children per household peaks in the 45-49 cohort on the 1910 census, then declines to 1.00 in the 70 or over cohort.

The mean number of children born exceed zero in the 15-19 cohort and reach .50 or more in the next cohort on both censuses (see Table 15). The mean number of children born exceeds 1.0 in that same 20-24 cohort on both censuses and peaks at about 6.6 in the 55-59 cohort on both censuses. The means decline somewhat in the cohorts after the peak values, though not evenly.

These figures indicate that, as at Colvile, women in the 1910 census appear to be having more children by extending their childbearing years rather than by starting earlier or increasing

VARIABLE	CHILD BORN	CHILD LIVE	FIRST BRTH	LAST BRTH	BIRTH SPC	% SURV	CH/W RATIO

			1900				
CHBORN	\	X	X	X	X	X	
CHLIVE	X	\	X	X	X	X	
CH/HSHLD	X	X		X	X	X	X
FIRSTCH	X	X	\	X	X	X	
LASTCH	X	X	X	\	X	X	X
BSPACE		X	X	X	\	X	X
%SURVCH	X	X			X	\	X
CH/W RATIO	X		X	X	X	X	\
AGE	X	X	X	X	X	X	X
SPAGE	X	X	X	X	X	X	
MSTAT	X	X	X	X	X		
MARAGE			X	X	X	X	
AGEDIF			X	X			
YRSMAR	X	X	X	X	X	X	X
EXOGENY	X	X			X	X	X
EXTEND	X	X	X	X	X	X	
FAMSIZE	X	X		X	X	X	X
SPTRIBE	X	X	X		X	X	X
WBLOOD		X			X	X	X
PAREXOGAMY	X	X			X	X	X
GEN. EXOG.					X		
LOCALITY		X		X	X	X	
OCCUPATION	X	X		X	X		
SPOCCUPAT	X	X		X			
FARM		X					
SPEAK		X			X	X	X
SPSPEAK		X		X	X	X	X
LITERATE	X			X	X	X	X

Table 16. Variables Affecting Fertility in Women 15-45
CREEK, 1900

the frequency of their pregnancies. This may reflect an easing of customary fertility restrictions or a rise in general health.

Internal Variation

All of the fertility measures are fairly variable and, as can be seen from Tables 16 and 17, that variability is patterned in complex ways. We examined the effects of a variety of

VARIABLE	CHILD BORN	CHILD LIVE	FIRST BRTH	LAST BRTH	BIRTH SPC	% SURV	CH/W RATIO

			1900				
CHBORN	\	X		X		X	
CHLIVE	X	\		X			
CH/HSOLD	X	X		X	X	X	X
FIRSTCH			\	X		X	
LASTCH	X	X	X	\	X	X	
BSPACE				X	\	X	X
%SURVCH	X		X	X	X	\	X
CH/W RATIO					X	X	\
AGE	X	X	X	X	X	X	X
SPAGE	X	X	X	X		X	X
MSTAT	X		*	*			X
MARAGE			X	X	X	X	X
YRSMAR	X	X	X	X			X
NUMAR					X		
EXOAMY		X			X		X
EXTEND	X	X	X	X		X	X
FAMSIZE	X	X		X			
WBLOOD	X	X			X		
GENEX		X			X	X	X
PAREXOGAMY		X			X		X
LOCALITY	*	*	X		X	*	
SPOCCUPAT					X	X	
LITERATE					X		
GRADUATE		X					X

Table 17. Variables Affecting Fertility in Women 15-45
CREEK, 1910

sociodemographic, economic, and educational or cultural factors, as well as those of intermarriage and locality, on patterning this variability. Indigenous social and political divisions were not reported by the enumerators on the Creek censuses.

Cross-correlations among fertility variables (Table 18) show a similar complexity. Most of the associations are rather obvious and predictable, as in the case of Colville. The same is true for the effects of sociodemographic variables shown in Table 19. Some interesting relationships do appear, however.

VARIABLE	CHILD BORN	CHILD LIVE	FIRST BRTH	LAST BRTH	BIRTH SPC	% SURV	CH/W RATIO

1900							
CHBORN	1.000						
CHLIVE	.749	1.000					
FIRSTCH	.175	.116	1.000				
LASTCH	.620	.605	.593	1.000			
BSPACE		-.205	-.292	.124	1.000		
%SURVCH	.486	.147			-.298	1.000	
CH/W RATIO	-.174		-.144	-.204	-.265	.246	1.000
1910							
CHBORN	1.000						
CHLIVE	.814	1.000					
FIRSTCH			1.000				
LASTCH	.629	.488	.559	1.000			
BSPACE				.290	1.000		
%SURVCH	.354		-.281	-.278	-.326	1.000	
CH/W RATIO					-.316	.311	1.000

Table 18. Cross-Correlations for Fertility Variables,
CREEK, 1900-1910

The negative correlations between children born and the child/woman ratio and survivorship in 1900 (shown in Table 18), along with the correlation between birthspacing and children alive, but not with children born in the same year, may indicate an effort by women to regulate completed family size. The negative correlation between survivorship and birthspacing supports this conclusion. The lack of correlation between the child/woman ratio and any measure for number of children in 1910 may indicate that cultural regulation of family size had declined by that time.

The weak correlation between the child/woman ratio and children born, and none to children alive, is somewhat problematic. Since the child/woman ratio compares the number of

VARIABLE	CHILD BORN	CHILD LIVE	FIRST BRTH	LAST BRTH	BIRTH SPC	% SURV	CH/W RATIO
<hr/>							
			1900				
AGE	.595	.518	.561	.878	.120	-.180	-.517
SPAGE	.425	.358	.261	.544		-.157	-.371
MARAGE			.496	.344		-.161	-.254
AGEDIF			.241	.207			
YRSMAR	.615	.535	.210	.658	.100	-.204	-.359
FAMSIZE	.417	.591		.382	.197	.128	.112
MAR. STATUS*							
Married	3.24	2.21		35.86			750.0
Present							
Married	2.26	1.40		35.60			471.0
Absent							
Widowed	3.89	2.58		32.68			345.0
Divorced	1.58	1.00		---			333.3
Single	1.79	1.29		40.00			36.0
EXTEND*							
None	3.44	2.3				.734	572.7
Vertical	3.16	2.34				.781	446.9
Lateral	3.05	1.95				.688	427.6
Both	2.54	1.69				.729	309.3
Unrelated	1.19	0.81				.686	---
<hr/>							
			1910				
AGE	.577	.396	.520	.881	.276	-.339	-.426
SPAGE	.439	.284	.284	.583		-.287	-.207
MARAGE			.351	.376	.344	-.243	-.267
YRSMAR	.595	.527	.242	.600		-.224	
NUMAR					.292		
FAMSIZE	.634	.780		.491			
MAR. STATUS*							
Married	3.33						837.7
Present							
Married	1.69						200.0
Absent							
Widowed	3.75						432.4
Divorced	0.50						600.0
Single	1.50						42.4
EXTEND*							
None	3.45	2.68	20.36			.812	715.1
Vertical	3.50	2.43	16.10			.674	415.1
Lateral	2.36	1.40	21.24			.681	463.8
Both	2.93	2.08	20.18			.633	590.9
Unrelated	1.80	1.00	---			.733	0.0

Table 19. Effects of Sociodemographic Factors on Fertility
CREEK, 1900-1910

children under five to the number of women in their active reproductive years, it should correlate well with both of these measures. Clearly, infant and juvenile mortality are affecting this relationship in rather complex ways.

Analysis of smaller age-restricted samples like those for Colville produced similar results, though differences exist between the older and younger groups of women. Most differences reflect the passage of time, such as greater mortality among older women's children. The relatively small size of the older sample and discrepancies in size between the two smaller samples render these differences statistically questionable.

Economic factors, husband's occupation in particular, affected fertility among the Creeks on both censuses (see Table 20). In 1900, only total numbers of children born and alive were significantly affected, but in 1910, birthspacing and survivorship rates reflect differences in economic pursuits. Farmers had the most children, while the unemployed had the fewest¹. Survival rates for children and mean birth intervals in 1910 clearly reveal the mechanisms producing this difference. In general, the data suggest that more prosperous individuals had more children.

Factors relating to education also affected fertility, as seen in Table 21. In 1900, these factors included literacy and the ability of a woman or her husband to speak English.

¹. The small numbers of persons who were involved in native economic pursuits (other than farming) or proprietary occupations renders their figures unreliable.

VARIABLE	CHILD BORN	CHILD LIVE	FIRST BRTH	LAST BRTH	BIRTH SPC	% SURV	CH/W RATIO
<hr/>							
1900							
OCCUPATION							
Farmer/ Rancher	5.08	4.04					580.7
Wage Labor	2.76	1.66					188.9
Proprietary	4.39	2.28					222.2
SP. OCCUP.							
None	1.50	0.50					
Farmer/ Rancher	3.52	2.46					
Native Economy	1.00	1.00					
	3.50	2.17					
Intermediary							
Wage Labor	2.18	1.38					
Proprietary	4.00	2.56					
FARM							
Yes		3.61					
No		2.44					
<hr/>							
1910							
SP. OCCUP.							
None					5.69	.678	
Farmer/ Rancher					3.40	.814	
Native Economy					---	---	
					---	---	
Intermediary							
Wage Labor					3.55	.711	
Proprietary					2.48	.752	

Table 20. Effects of Economic Factors on Fertility
CREEK, 1900-1910

Graduation from school and literacy affected fertility in 1910, by which time few Creeks were monolingual in their own language. Those women who were most traditional (i.e., illiterates who spoke no English and did not graduate from school) had longer intervals between births and lost more children to infant and juvenile mortality.

VARIABLE	CHILD BORN	CHILD LIVE	FIRST BRTH	LAST BRTH	BIRTH SPC	% SURV	CH/W RATIO
<hr/>							
1900							
LITERATE							
Yes	3.01				3.17	.767	559.0
No	3.39				3.94	.691	406.9
SPEAK							
Yes		2.42			3.26	.769	542.7
No		1.86			4.09	.674	388.7
SP. SPEAK							
Yes		2.35			3.21	.764	878.3
No		1.98			4.25	.673	521.5
<hr/>							
1910							
GRADUATE							
Yes		3.60					1000.0
No		2.36					592.8
LITERATE							
Yes					3.24		
No					4.66		

Table 21. Effects of Educational Factors on Fertility
CREEK, 1900-1910

As can be seen in Table 22, intermarriage was the most important factor affecting fertility among the Creeks in 1900 and 1910. Women who married exogamously (mostly to whites), whose parents had done so, or were of mixed ancestry all gave birth to more children at shorter intervals and saw more of them survive. The effects were most pronounced for women whose parents and earlier ancestors had intermarried.

Locality of residence also affected fertility among Creek women, as shown in Table 23. Because of sampling differences, the 1900 and 1910 censuses are not comparable in this regard. While most of the variability reflected here probably derives from the interactions of the previously discussed variables,

VARIABLE	CHILD BORN	CHILD LIVE	FIRST BRTH	LAST BRTH	BIRTH SPC	% SURV	CH/W RATIO
<hr/>							
1900							
EXOGENY							
Yes	3.63	2.68			3.14	.731	977.7
No	3.06	2.00			3.81	.772	639.7
PAR. EXOGENY							
Yes	3.79	2.77			3.14	.793	573.0
No	3.10	2.05			3.78	.713	452.4
GEN. EXOGENY							
None							630.4
One							819.3
Two							1100.0
SP. TRIBE							
S.E. Indian	3.45	2.09			4.55	.648	500.0
Seminole	3.5	1.79			3.62	.478	642.9
Creek	2.99	1.98			3.80	.725	633.4
Muskogee	3.57	2.09			3.86	.631	679.5
Black	4.0	2.83			2.91	.733	857.1
White	3.50	2.79			3.10	.716	1154.0
WHITE BLOOD							
None		2.07			3.85	.696	439.2
Mixed		2.68			3.15	.815	608.5
<hr/>							
1910							
EXOGENY							
Yes		2.94			2.90		1094.0
No		2.27			4.25		739.3
PAR. EXOGENY							
Yes		3.25			2.97		866.7
No		2.29			4.09		580.3
GEN. EXOGENY							
None		2.19			4.37	.741	721.4
One		2.85			2.64	.881	1033.0
Two		3.23			3.11	.784	1212.0
WHITE BLOOD							
None	3.12	2.22			4.31		
Mixed	3.92	3.13			3.09		

Table 22. Effects of Inter-marriage on Fertility
CREEK, 1900-1910

which tended to be localized, the patterns are not clear. Wagoner and Muskogee counties, for instance, both contain relatively large white and "mixed-blood" populations, as well as most commercial activity, but differ significantly from one

VARIABLE	CHILD BORN	CHILD LIVE	FIRST BRTH	LAST BRTH	BIRTH SPC	% SURV	CH/W RATIO

1900							
LOCALITY							
Wagoner Co.		1.89	19.49			.703	471.7
Tulsa Co.		2.22	20.16			.735	546.0
Creek Co.		2.44	19.24			.758	620.9
Okmulgee Co		2.13	19.56			.673	384.6
Muskogee Co		2.84	21.13			.843	552.6
McIntosh Co		2.58	20.02			.813	539.6
Okfuskee Co		1.88	20.16			.713	458.5
Hughes Co.		1.91	18.72			.644	361.6
1910							
LOCALITY							
Bearden					5.09		
Boley-Paden					3.54		
Castle-					5.87		
Okemah							
Okfuskee					3.25		
Weleetka					3.48		
Okmulgee					2.93		
Beggs					3.46		
Bryan					2.96		

Table 23. Effects of Locality on Fertility
CREEK, 1900-1910

another. The largely conservative populations of Hughes, Okfuskee, and Okmulgee counties likewise significantly differ.

Diachronic Change

Overall fertility patterns changed relatively little among the Creeks between 1900 and 1910 (see Table 13). Mean values for each of the measures increased, but this increase was minor for all measures except the child/woman ratio. There was also little change in overall variability on these measures. The number of children alive, children per household, age at first birth, and

birthspacing all became slightly more variable through time. Children born, age at last birth, and survivorship all became slightly less variable, however.

The reduction in the number of variables affecting the measures of fertility from 1900 to 1910 constitutes a major trend in the patterning of variation for the Creeks. An additional trend is the elimination of virtually all significant associations except those related to familial and marital status on one hand, and acculturation/assimilation on the other. Association with outsiders, through economic activity, education or intermarriage, produced profound effects on fertility. Marriage practices may have remained constant, but fertility was altered dramatically when Indian women came in contact with the world of non-Indians.

FEATURE	YEAR	MEAN	STD	N
CH/WOMAN RATIO	1885	311.2	---	662
	1900	384.4	---	411
	1910	479.7	---	419
	1930	624.4	---	402
CHILD BORN	1900	2.61	1.90	332
	1910	3.83	2.35	217
CHILD ALIVE	1900	1.52	1.32	332
	1910	2.38	1.75	216
CHILD/HSHLD	1885	1.08	1.18	607
	1900	1.10	1.11	353
	1910	1.37	1.63	373
	1930	1.48	1.96	384
FIRST BIRTH	1885	20.72	4.29	170
	1900	20.40	6.01	147
	1910	19.82	4.11	140
	1930	21.03	3.87	140
LAST BIRTH	1885	33.30	6.46	146
	1900	35.88	6.25	72
	1910	36.52	4.83	75
	1930	37.13	5.60	40
BIRTHSPACE	1885	6.18	3.77	193
	1900	5.24	3.19	118
	1910	4.58	2.80	143
	1930	3.14	1.84	144
SURVIVORSHIP	1900	.628	.331	279
	1910	.664	.306	211

Table 24. Overall Fertility
CROW, 1885-1930

C. CROW

The overall fertility statistics for the Crow are shown in Tables 24-26. In 1886, the Crow had a child/woman ratio of 311.2 and a mean of 1.08 children per household (among women 15-45). Women averaged 20.72 years at first birth and 33.3 years at last birth, with a mean birth interval of 6.18 years. The child/woman ratio rose to 384.4 in 1900, 479.7 in 1910, and 624.4 in 1930, and the other principal fertility measure, "Child Alive," rose accordingly. Women continued to begin having children at about 20

CHRT	1885		1900		1910		1930	
	RATIO	WOM	RATIO	WOM	RATIO	WOM	RATIO	WOM
0-4	0	135	0	94	0	119	0	154
5-9	0	161	0	98	0	92	0	142
10-14	0	131	0	61	0	74	0	113
15-19	110	109	216	37	155	84	210	100
20-24	374	108	631	66	782	55	578	64
25-29	513	78	698	53	923	39	775	71
30-34	420	85	413	75	803	66	1218	55
35-39	454	111	375	64	725	51	877	57
40-44	243	105	170	47	242	66	586	29
45-49	79	77	130	69	52	58	154	26
50-54	0	55	68	88	24	41	23	44
55-59	0	39	20	51	0	49	0	30
60-64	0	38	26	39	33	61	0	34
65-69	0	36	0	14	0	36	0	24
70+	0	24	43	23	0	24	0	16

Table 25. Child/Woman Ratio by Cohort
CROW

CHRT	TOTAL	1900		TOTAL	1910	
		RATIO	WOM		RATIO	WOM
0-4	0	0.00	94	0	0.00	119
5-9	0	0.00	98	0	0.00	92
10-14	1	0.02	61	0	0.00	74
15-19	12	0.32	37	18	0.21	84
20-24	116	1.76	66	70	1.27	55
25-29	120	2.26	53	91	2.33	39
30-34	208	2.77	75	232	3.52	66
35-39	203	3.17	64	211	4.14	51
40-44	162	3.45	47	181	2.74	66
45-49	258	3.74	69	154	2.66	58
50-54	375	4.26	88	101	2.46	41
55-59	185	3.63	51	92	1.88	49
60-64	145	3.72	39	178	2.92	61
65-69	43	3.07	14	49	1.36	36
70+	115	5.00	23	7	0.29	24

Table 26. Children Born by Cohort
CROW

years for most of the period under study, but the age of their last child appears to have extended nearly four years, from 33.3 in 1885 to 37.13 in 1930. In addition, the spacing of births within this childbearing period clearly shrank between 1885 and 1930, dropping from more than six years to just over three years.

The overall fertility statistics present a picture of a community producing a growing number of children through an extension of the childbearing years and more frequent pregnancy. These shifts suggest an alteration in customary family practices and, perhaps, a relaxing of previous controls on family size. This impression is confirmed by the data presented in Table 25 which shows the steepest increases in the child/woman ratio in the age cohorts from age 30 upward. Table 26, Children Born By Cohort, offers a similar picture.

Internal Variability

As can be seen in Tables 27-28, there is considerable patterning of variability among the Crow, but much of it reflects developmental and general demographic factors. The cross-correlations among the fertility variables (Table 29) and the effects of sociodemographic factors (Table 30) also support the view that variability is largely the result of demographic and developmental processes since they reflect only passage of time and marital status. Using smaller samples of younger (10-35 year olds) and older women (40-50 year olds) reveals no unusual

VARIABLE	CHILD BORN	CHILD LIVE	FIRST BRTH	LAST BRTH	BIRTH SPC	% SURV	CH/W RATIO
<hr/>							
1886							
CH ALIVE	-	\	X	X	X	-	
FIRSTCH	-	X	\	X		-	
LASTCH	-	X	X	\	X	-	
BSPACE	-	X		X	\	-	
AGE	-	X	X	X	X	-	X
SPAGE	-	X	X	X	X	-	X
MARAGE	-	X	\	X		-	
AGEDIF	-		X	X		-	X
FAMSIZE	-	X	X			-	
<hr/>							
1900							
CHBORN	\	X	X	X		X	
CHLIVE	X	\		X		X	
FIRSTCH	X		\	X			
LASTCH	X	X	X	\	X		
BSPACE				X	\		X
%SURVCH	X	X				\	X
CH/W RATIO	X	X		X	X		\
AGE	X	X	X	X	X		X
SPAGE	X	X	X	X	X		X
MSTAT							X
MARAGE			X	X	X	X	
AGEDIF			X				
YRSMAR	X	X	X	X	X	X	X
EXOLOGY					(X)	(X)	X
EXTEND	X		*	*	*	(X)	
FAMSIZE	X	X			X	X	X
DWELLTYPE	X		X				
WBLOOD		(X)	(X)	(X)	(X)	(X)	X
PAREXOGAMY		(X)	(X)	(X)	(X)	(X)	X
GEN. EXOG							X
SPOCCUPAT				(X)		*	
SPEAK	X		X	X	X	X	X

Table 27. Variables Affecting Fertility in Women 15-45
CROW, 1900

VARIABLE	CHILD BORN	CHILD LIVE	FIRST BRTH	LAST BRTH	BIRTH SPC	% SURV	CH/W RATIO
<hr/>							
1910							
CHBORN	\	X	X	X		X	
CHLIVE	X	\		X	X	X	
FIRSTCH	X		\	X		X	
LASTCH	X	X	X	\	X	X	
BSPACE		X		X	\	X	X
%SURVCH	X	X	X	X	X	\	X
CH/W RATIO					X	X	\
AGE	X	X	X	X	X	X	X
SPAGE	X	X	X	X	X	X	
MSTAT	X	X			X	X	X
MARAGE			X	X			X
YRSMAR	X	X	X	X	X	X	X
NUMAR			X	X			X
FAMSIZE	X	X		X	X	X	X
DWELLTYPE			X				
WBLOOD	X	X			X	X	
PAREXOGAMY	X	X			X	X	
OCCUPATION			*				X
SPOCCUPAT	X	*					
RESIDE			X				
LANG	X	X	X	X	X	X	X
SPLANG	X		X	X	X	X	X
LITERATE	X		X	X	X	X	X
GRADUATE	X		X	X	X	X	X
<hr/>							
1930							
CH ALIVE	-	\	X	X		-	X
FIRSTCH	-	X	\	X		-	
LASTCH	-	X	X	\	X	-	
BSPACE	-			X	\	-	X
CH/W RATIO	-	X		X	X	-	\
AGE	-	X	X	X	X	-	X
SPAGE	-	X	X	X	X	-	X
MSTAT	-	X				-	X
MARAGE	-	X		X		-	
FAMSIZE	-	X	X	X		-	X
IBLOOD	-		X		X	-	- X
ATJURIS	-			X		-	X

Table 28. Variables Affecting Fertility in Women 15-45
CROW, 1910-1930

VARIABLE	CHILD BORN	CHILD LIVE	FIRST BRTH	LAST BRTH	BIRTH SPC	% SURV	CH/W RATIO

1886							
CH ALIVE	-	\	-.191	.259	-.259	-	
FIRSTCH	-	-.191	\	.622		-	
LASTCH	-	.259	.622	\	.418	-	
BSPACE	-	-.259		.418	\	-	
1900							
CHBORN	\	.715	.246	.447		-.516	
CHLIVE	.715	\		.380		.174	
FIRSTCH	.246		\	.808			
LASTCH	.447	.380	.808	\	.516		
BSPACE				.516	\		-.261
%SURVCH	.174	.174				\	.201
CH/W RATIO	-.242	-.171		-.170	-.180		\
1910							
CHBORN	\	.575	.175	.467		-.504	
CHLIVE	.575	\		.291	-.229	.327	
FIRSTCH	.175		\	.763		-.206	
LASTCH	.467	.291	.763	\	.429	-.263	
BSPACE		-.229		.429	\	-.402	-.321
%SURVCH	-.504	.327	-.206	-.263	-.402	\	.281
CH/W RATIO						-.321	.281
1930							
CH ALIVE	-	\	-.258	.449		-	.308
FIRSTCH	-	-.258	\	.565		-	
LASTCH	-	.449	.565	\	.403	-	
BSPACE	-			.403	\	-	-.363
CH/W RATIO	-	-.356		-.355	-.321	-	\

Table 29. Cross-Correlations for Fertility Variables,
CROW, 1886-1930

patterns and variability seems only to reflect obvious demographic factors.

Economic factors had relatively little impact on Crow fertility, as can be seen in Table 31. In 1900, women living in "movable" dwellings (tents or tipis) gave birth to more children than those in "fixed" dwellings. Age affects this measure somewhat, since the former group is older on average. Some of

VARIABLE	CHILD BORN	CHILD LIVE	FIRST BRTH	LAST BRTH	BIRTH SPC	% SURV	CH/W RATIO
<hr/>							
1886							
AGE	-	.252	.520	.862	.373	-	-.465
SPAGE	-	.188	.238	.551	.346	-	-.301
MARAGE	-	-.191	\	.622		-	
AGEDIF	-		.256	.217		-	-.161
FAMSIZE	-	.669	-.180			-	
<hr/>							
1900							
AGE	.449	.331	.718	.922	.485		-.348
SPAGE	.424	.328	.443	.622	.354		-.341
MARAGE			.440	.442	.180	.172	
AGEDIF			.245				
YRSMAR	.542	.348	.458	.601	.350	-.278	-.356
FAMSIZE	.297	.583			-.181	.266	.475
MAR. STATUS*							
Married							424.6
(Present)							
Married							0.0
(Absent)							
Widowed							176.5
Single							0.0
EXTEND*							
None	2.58					.636	
Vertical	3.67					.328	
Lateral	2.67					.900	
Unrelated	2.33					.637	
<hr/>							
1910							
AGE	.458	.300	.719	.898	.401	-.258	-.445
SPAGE	.355	.219	.273	.379	.201	-.194	
MARAGE			.448	.373			-.258
YRSMAR	.545	.341	.204	.451	.336	-.298	-.280
NUMAR			.333	.289			-.251
FAMSIZE	.460	.798		.222	-.304	.265	.272
MAR. STATUS*							
Married	3.71	19.59			4.90	.642	553.6
(Present)							
Married	5.10	21.14			2.72	.868	1030.0
(Absent)							
Widowed	3.00	20.20			4.60	.627	260.9
Single	4.50	18.00			---	.750	13.7
<hr/>							
1930							
AGE	-	.309	.510	.867	.419	-	-.476
SPAGE	-	.207	.262	.608	.377	-	-.397
MARAGE	-	-.258		.565		-	
FAMSIZE	-	1.000	-.258	.449		-	.308
MAR. STATUS*							
Married	-	2.22					961.2
(Present)							
Married	-	1.71					585.7
(Absent)							
Widowed	-	1.38					529.4
Single	-	0.04					27.5

Table 30. Effects of Sociodemographic Factors on Fertility
CROW, 1886-1930

VARIABLE	CHILD BORN	CHILD LIVE	FIRST BRTH	LAST BRTH	BIRTH SPC	% SURV	CH/W RATIO
<hr/>							
			1900				
DWELL TYPE							
Fixed	2.29						
Movable	3.01						
<hr/>							
			1910				
SP. OCCUPAT							
None	5.00						
Farmer/ Rancher	3.87						
	2.47						
Intermediary							
Wage Labor	3.60						
Proprietary	6.50						
<hr/>							
			1930				
ATJURIS							
Yes							683.3
No							295.1

Table 31. Effects of Economic Factors on Fertility
CROW, 1886-1930

the difference, however, may reflect cultural differences, since those in "movable" dwellings were at least somewhat more conservative in this regard.

Husbands' occupations affected various aspects of fertility in 1910. Women married to unemployed men gave birth to more children than any other group, but this is likely a function of age since most of these are older women. For other occupational categories, there seems to be a relationship between prosperity and more children.

While economic variables were not reported on the 1930 census, it can be assumed that those who lived off reservation differed from those on the reservation in this regard. The higher child/woman ratio for those on the reservation indicates a

VARIABLE	CHILD BORN	CHILD LIVE	FIRST BRTH	LAST BRTH	BIRTH SPC	% SURV	CH/W RATIO
-----1900-----							
SPEAK ENGLISH							
Yes	1.89				2.59	.744	625.0
No	2.81				5.85	.598	318.8
-----1910-----							
LANGUAGE							
Crow	4.17	2.10			5.67	.544	324.5
English	3.47	2.63			3.67	.779	600.0
SP.LANGUAGE							
Crow	4.22				5.62	.569	419.0
English	3.04				3.84	.745	781.8
LITERATE							
Yes	3.40				3.83	.797	610.8
No	4.18				5.47	.553	363.1
GRADUATE							
Yes	3.44				3.66	.772	602.9
No	4.18				5.57	.567	357.1

Table 32. Effects of Educational Factors on Fertility
CROW, 1886-1930

reversal of the earlier pattern, since women on the reservation should be more "traditional" than those off-reservation.

Unlike economic factors, education had an increasingly important impact on Crow fertility (Table 32). In both 1900 and 1910, the ability of a woman or her husband to speak English and evidence of some education produced shorter intervals between births and greater survival of her children. The differences here are quite pronounced, with educated Crow women reducing their birth interval by a third and increasing survival of their children by about fifty percent. If continued, this situation could have profound consequences for Crow society.

VARIABLE	CHILD BORN	CHILD LIVE	FIRST BRTH	LAST BRTH	BIRTH SPC	% SURV	CH/W RATIO
<hr/>							
1900							
WHITE BLOOD							
None		1.47	19.43		5.57	.614	341.8
Mixed		2.60	21.16		1.70	.876	1437.0
EXO GAMY							
Yes					2.40	.793	1000.0
No					5.50	.613	391.7
PAR. EXO GAMY							
Yes		2.31			2.75	.915	1411.0
No		1.48			5.47	.610	341.0
<hr/>							
1910							
WHITE BLOOD							
None	3.61	2.04			5.05	.622	
Mixed	4.83	4.03			3.22	.867	
PAR. EXO GAMY							
Yes	4.86	3.84			3.30	.849	
No	3.61	2.07			5.02	.626	
<hr/>							
1930							
INDIAN BLOOD							
Mixed	-	1.20					495.3
Full	-	1.80					772.5

Table 33. Effects of Inter marriage on Fertility
CROW, 1886-1930

Inter marriage had similarly profound impacts on Crow fertility, as seen in Table 33. "Mixed-bloods" and women who married exogamously (mostly to white men) had only half as long between births as other Crow women in 1900 and about a third more of their children survived. Clearly "mixed-bloods", like educated Crow women, were out reproducing their "full-blood" sisters. In 1910, the differences remain, but decline somewhat. By 1930, the situation has reversed. On that census, "full-blood" Crow women have more children than do "mixed-bloods".

Diachronic Change

The Crows show a general trend toward increasing fertility between 1886 and 1930. The child/woman ratio and numbers of children born, alive, and living at home all steadily increase through time, as do survivorship of children and age at last birth. At the same time, birthspacing decreases to about half of its original level. Age at first birth steadily declines through 1910, after which it rebounds to a level slightly higher than at the beginning of the period.

While the overall variability of fertility through time is somewhat inconsistent, there appears to be a clear trend through time. Initially, in 1900, intermarriage with whites and direct influence of Euro-American practices exerts the greatest influence on fertility patterns. Later, indirect cultural influences through education, language, and the like seem to exert more influence. Through most of this period, Euro-American influence lowers birthspacing and raises survivorship, contributing to greater fertility. By 1930, however, this trend shows signs of reversing itself, as full-bloods have higher child/woman ratios and more children per household. This is associated with an overall increase in the fertility of households with no white ancestry and may reflect a rising rate of survivorship among these families.

VARIABLE	VALUE	MEAN	STD	N
CH/WOMAN RATIO	1885	438.2	---	267
	1900	617.7	---	395
	1910	628.4	---	401
	1930	532.4	---	524
CHILD BORN	1900	4.77	3.65	327
	1910	4.84	3.44	251
CHILD ALIVE	1900	2.26	1.85	327
	1910	2.90	1.90	278
CHILD/HSGLD	1885	1.56	1.72	266
	1900	1.69	1.74	369
	1910	1.93	1.97	395
	1930	1.64	2.02	485
FIRST BIRTH	1885	18.92	3.53	100
	1900	20.31	9.16	181
	1910	21.98	4.45	117
	1930	20.48	3.32	162
LAST BIRTH	1885	32.44	7.35	75
	1900	33.80	7.91	56
	1910	35.84	8.18	137
	1930	35.95	6.34	78
BIRTHSPACE	1885	4.20	2.30	106
	1900	4.13	2.42	163
	1910	4.65	3.22	197
	1930	3.37	1.64	201
SURVIVORSHIP	1900	.528	.307	286
	1910	.680	.290	229

Table 34. Overall Fertility
HOPI, 1885-1930

C. HOPI

Overall fertility statistics for the Hopi are shown in Table 34. As can be seen, the Hopi had a child/woman ratio of 438.2, with a mean of 1.56 children per household in 1885. That same year, Hopi women began bearing children at about 19 years and

stopped before they were 33. Their children came approximately 4 years apart. Fertility as measured by child/woman ratios rose dramatically in 1900 and 1910, even though birth spacing did not change and women actually restricted their years of childbearing (In 1910, when the highest fertility rates were reported, the mean age at first birth was nearly 22 years.)

Fertility actually fell between 1910 and 1930, dropping to a figure midway between the levels recorded in 1885 and 1900. Ironically, this was observed while birth spacing declined slightly and the period between first and last births grew slightly longer. The Hopi appear to be a community where preexisting controls over conception and birth continued into the twentieth century. Despite the rapid rise in fertility, the Hopis appear to have borne and spaced their children in a consistent manner throughout the period under study.

The crucial factor in Hopi fertility appears to be child mortality. Comparing rates of children born and children alive per mother in the 1900 and 1910 enumerations, one can see that the latter figure is slightly more than half the former. That is, nearly 50% of Hopi newborns did not survive. Specifically, the rate of survival in 1900 was 52.8%, while in 1910 it was 68%. The increase in the survival rate in 1910 probably accounts for the fertility increase recorded during that year.

Looking at the age-specific statistics (Tables 35-36), we see detailed support for the notion that customary practices played a major role among the Hopi, as well as further evidence

CHRT	1885		1900		1910		1930	
	RATIO	WOMEN	RATIO	WOMEN	RATIO	WOMEN	RATIO	WOMEN
0-4	0	59	0	124	0	181	0	163
5-9	0	46	0	130	7	143	0	164
10-14	0	51	0	161	38	78	0	140
15-19	172	58	250	60	200	75	15	134
20-24	745	47	696	69	314	35	517	87
25-29	727	22	895	76	714	42	1031	98
30-34	600	35	866	67	900	50	1000	57
35-39	472	36	677	62	924	66	879	58
40-44	347	49	286	28	766	65	395	43
45-49	50	20	152	33	603	68	140	43
50-54	87	23	27	37	184	49	54	37
55-59	0	5	0	31	111	9	17	58
60-64	0	13	0	25	0	38	0	32
65-69	0	9	0	14	0	14	0	19
70+	0	6	0	8	0	13	0	9

Table 35. Child/Woman Ratio by Cohort
HOPI, 1885-1930

CHRT	1900			1910		
	TOTAL	RATIO	WOMEN	TOTAL	RATIO	WOMEN
0-4	0	0.00	124	0	0.00	181
5-9	0	0.00	130	0	0.00	143
10-14	0	0.00	161	0	0.00	78
15-19	25	0.42	60	14	0.19	75
20-24	140	2.03	69	28	0.80	35
25-29	310	4.08	76	79	1.88	42
30-34	382	5.70	67	157	3.14	50
35-39	429	6.92	62	317	4.80	66
40-44	223	8.32	28	300	4.62	65
45-49	225	6.82	33	351	5.16	68
50-54	228	6.16	37	225	4.59	49
55-59	185	5.97	31	66	7.33	9
60-64	172	6.88	25	102	2.68	38
65-69	65	4.64	14	40	2.86	14
70+	40	5.00	8	44	3.38	13

Table 36. Children Born by Cohort
HOPI, 1885-1930

that infant mortality was a central feature of reservation family life. The cohort-by-cohort analysis of the child/woman ratio indicates that women's most productive childbearing years began in their mid-20s. Both Table 35 and 36 show a sharp increase in this measure beginning with the 25-29 cohort for all censuses. An examination of age-specific infant mortality produces an even more striking picture. In 1900 among the cohort of women 30-34, for example, 188 of 382 children born (49%) were reported by the enumerator to be alive.

Table 35 also suggests that the decline in Hopi fertility reported in 1930 was concentrated among women over the age of 35. For women 45-49, for example, the child/woman ratio dropped from 603 to 140 between 1910 and 1930, a decline of more than 75%.

Internal Variation

As can be seen in Tables 37-38, few variables other than those relating to demographic and developmental processes affected Hopi fertility patterns. The cross-correlations among the fertility variables (Table 39) generally show predictable patterns, as do the associations with sociodemographic variables (Table 40). The negative correlations, shown in Table 39, of birth spacing with children alive and survivorship in 1900 or with age at first birth and survivorship in 1910 may indicate a conscious attempt to achieve a minimum desirable number of children. This is reinforced by the positive correlations between birthspacing and age at last birth in 1900 and 1930. In

VARIABLE	CHILD BORN	CHILD LIVE	FIRST BRTH	LAST BRTH	BIRTH SPC	% SURV	CH/W RATIO
<hr/>							
1885							
CH ALIVE	-	\		X		-	
FIRSTCH	-		\	X		-	
LASTCH	-	X	X	\	X	-	
BSPACE	-			X	\	-	
AGE	-	X	X	X	X	-	X
SPAGE	-	X	X	X	X	-	X
MARAGE	-			X		-	
FAMSIZE	-	X		X		-	
BAND	-		X		X	-	
<hr/>							
1900							
CHBORN	\	X	X	X		X	X
CHLIVE	X	\		X	X	X	X
FIRSTCH	X		\	X		X	X
LASTCH	X	X	X	\	X	X	
BSPACE		X		X	\	X	X
%SURVCH	X	X	X		X	\	X
CH/W RATIO	X	X	X		X	X	\
AGE	X	X	X	X	X	X	X
SPAGE	X	X	X	X	X	X	X
MSTAT			(X)	(X)	*		X
MARAGE			X	X	X		
AGEDIF	X	X	X	X	X		
YRSMAR	X	X		X		X	X
EXTEND	X	X		X	X		X
FAMSIZE	X	X	X	X		X	X
DWELLSIZE				X	X		
LOCALITY	X	X	X	X	X	X	X
SPEAK	X	X	(X)	(X)			X
SPSPEAK	X	X				X	
LITERATE				X	*		X
NAMETYPE			*	*	*	*	X

Table 37. Variables Affecting Fertility in Women 15-45
HOPI, 1900

VARIABLE	CHILD BORN	CHILD LIVE	FIRST BRTH	LAST BRTH	BIRTH SPC	% SURV	CH/W RATIO

1910							
CHBORN	\	X		X	X		
CHLIVE	X	\		X			
FIRSTCH			\	X	X		X
LASTCH	X	X	X	\			
BSPACE	X		X		\	X	X
%SURVCH	X				X	\	X
CH/W RATIO			X		X	X	\
AGE	X	X	X	X	X	X	X
SPAGE	X	X	X	X		X	
MSTAT	X	*	X	X			X
MARAGE			X	X			
YRSMAR	X	X		X			X
EXTEND	X	X	X	X	X		
FAMSIZE		X					
LOCALITY	X	X	X	X	X	X	X
OCCUPATION	X	X	X	X	*		X
SPOCCUPAT	X	X	X	X			
LITERATE	X	X	X	X			X
GRADUATE	X	X	X	X			X
1930							
CH ALIVE	-	\	X	X	X	-	X
FIRSTCH	-		X	\	X		- X
LASTCH	-	X	X	\	X	-	X
BSPACE	-				X	\	- X
CH/W RATIO	-	X	X	X	X	-	\
AGE	-		X	X	X	X	- X
SPAGE	-		X	X	X	X	- X
MSTAT	-					-	X
MARAGE	-	X	\	X		-	X
AGEDIF	-		X			-	
FAMSIZE	-	X		X		-	X
BAND	-		X		X	-	X
ATJURIS	-			X	X	-	

Table 38. Variables Affecting Fertility in Women 15-45
HOPI, 1910

other words, women who began childbearing relatively early had a longer interval between births than those who began later, as did those whose children survived better. Likewise women with longer intervals between births continued to bear children longer. This

VARIABLE	CHILD BORN	CHILD LIVE	FIRST BRTH	LAST BRTH	BIRTH SPC	% SURV	CH/W RATIO
<hr/>							
1900							
MAR. STATUS							
Married							754.0
Present							
Married							428.6
Absent							
Widowed							120.0
Divorced							200.0
Single							0.0
EXTEND							
None	5.24	2.62	20.56		3.73		806.9
Vertical	4.68	1.97	19.30		4.50		493.7
Lateral	4.00	1.74	18.79		4.46		279.1
Both	4.00	1.42	21.55		5.24		491.8
Unrelated	0.00	0.00	---		---		0.0
1910							
MAR. STATUS							
Married	5.00		21.88				785.7
Present							
Married	3.00		0.00				400.0
Absent							
Widowed	5.88		5.25				0.0
Divorced	3.24		17.89				645.0
Single	2.00		4.43				133.0
EXTEND							
None	5.92	3.29		37.67			
Vertical	4.65	2.89		35.59			
Lateral	4.03	2.66		36.33			
Both	3.65	2.29		31.43			
1930							
MAR. STATUS							
Married							903.0
Present							
Married							0.0
Absent							
Widowed							636.4
Single							9.7

Table 40. Effects of Sociodemographic Factors on Fertility
HOPI, 1885-1930

VARIABLE	CHILD BORN	CHILD LIVE	FIRST BRTH	LAST BRTH	BIRTH SPC	% SURV	CH/W RATIO
<hr/>							
1885							
TOWN							
Tewa					5.52		
Sichumnovi					4.59		
Walpi					4.69		
Meshongnovi					3.84		
Shipalovi					3.30		
Shongopavi					3.43		
<hr/>							
1900							
TOWN							
Shingwopavi	2.87	1.16	24.53	32.38	5.69	.497	384.6
Shipalovi	3.38	1.77	23.11	40.50	5.31	.505	523.8
Meshongnovi	4.71	1.56	23.30	38.18	4.19	.329	261.9
Oraibi	5.52	2.79	19.31	30.59	3.42	.576	786.1
First Mesa	4.48	2.13	19.38	32.20	4.98	.533	633.9
<hr/>							
1910							
TOWN							
Sichumnovi	6.44	3.14	19.21	37.89	4.24	.588	851.1
Shipalovi	4.76	2.58	19.70	34.14	4.21	.578	695.7
Shimopavi	4.41	2.26	22.35	33.60	3.99	.607	733.3
Walpi	3.55	2.84	21.79	32.31	5.87	.897	500.0
Meshongnovi	4.08	2.64	22.56	35.68	4.73	.746	814.8
Tewa	4.24	2.76	19.83	37.41	5.60	.709	731.7
Oraibi	5.50	3.29	11.50	36.86	4.30	.659	617.3
Bacavi	6.08	3.89	22.00	36.33	4.35	.563	692.3
<hr/>							
1930							
TOWN							
Tewa					3.50		633.8
Sichumnovi					3.63		538.5
Walpi					4.18		382.4
Shipalovi					3.31		560.0
Meshongnovi					3.28		568.6
Shimopavi					3.31		656.3
Oraibi					2.82		553.2
Bacavi					3.40		440.0
Hotevilla					3.43		400.0

Table 41. Effects of Indigenous Divisions on Fertility
HOPI, 1885-1930

picture was not changed by using smaller samples with more restricted age ranges.

VARIABLE	CHILD BORN	CHILD LIVE	FIRST BRTH	LAST BRTH	BIRTH SPC	% SURV	CH/W RATIO

			1910				
OCCUPATION							
None	3.97	2.18	15.52				507.9
Native Economy	5.19	3.19	21.69				839.8
SP. OCCUP							
None	2.67	1.81					
Farmer/ Rancher	5.54	3.21					
Native Economy	5.24	3.21					
Wage Labor	2.71	1.93					
Proprietary	4.40	2.40					

Table 42. Effects of Economic Factors on Fertility
HOPI, 1885-1930

Internal social and political divisions, towns or villages for the Hopi, differed in regard to fertility on all censuses, as seen in Table 41. Differences among the villages in average interval between births was marked for all censuses. It is not clear, however, why the culturally homogeneous villages should differ so consistently on variables which largely reflect cultural practices, such as birthspacing and age at first birth. That the exogenous Tewa village stands out in this regard is not surprising, but Sichamovi, resettled by Zuni in the 1860s, does not differ from the other villages.

Economic factors, such as occupation and husband's occupation, had relatively little impact on Hopi fertility, as seen in Table 42. Much of the differences seen here reflect developmental and life-cycle differences. Mature men are generally farmers and mature women engage in native trades, while

VARIABLE	CHILD BORN	CHILD LIVE	FIRST BRTH	LAST BRTH	BIRTH SPC	% SURV	CH/W RATIO
<hr/>							
1900							
SPEAK ENGLISH							
Yes	1.48	0.65				.462	375.0
No	5.08	2.38				.532	375.0
SP.SPEAK ENG.							
Yes	2.57	1.11					
No	5.39	2.57					
LITERATE							
Yes							333.3
No							637.2
NAMETYPE							
European							250.0
Indian							645.8
<hr/>							
1910							
LITERATE							
Yes	2.55	1.72	15.77				400.0
No	5.66	3.31	21.29				775.3
GRADUATE							
Yes	2.62	1.74	16.21				
No	5.43	3.20	20.33				
NAMETYPE							
European							115.4
Indian							665.8

Table 43. Effects of Educational Factors on Fertility
HOPI, 1885-1930

younger people are unemployed or "farm laborers" (listed here under wage labor). Most of these latter probably assist older relatives in their fields, rather than working for wages.

The minimal effects of education and name type on Hopi fertility, shown in Table 43 reflects the same picture. Only younger women are likely to speak English, be literate, or have graduated from school. This is the same group most likely to use European-style names rather than Hopi names. The differences in the numbers of children, therefore largely seem to reflect the greater opportunities of older women for child-bearing.

Diachronic Change

Overall fertility rates changed significantly among the Hopi between 1885 and 1930. Several measures, including the number of children born, children alive, age at last birth, and rate of survivorship among children, all steadily increased during the period under consideration, even though the survival rate for children remained appallingly low.

Overall variability also changed between 1885 and 1930. Some measures, such as the number of children born and rate of child survival, became less variable, while others, such as the number of children alive and per household, became more so. Variability on age at last birth and birthspacing increased steadily until 1910, after which it declined to below the original 1885 level. Variability on age at first birth jumped tremendously between 1885 and 1900, then declined to slightly below the 1885 level in 1930.

In 1885, village had little effect on variability. After 1885, differences between villages remained a constant factor in patterning variability on all measures of fertility. Household extension was associated with differences in fertility patterns, but became less significant after 1900. Likewise, the ability of a woman or her husband to speak English--important in 1900--was largely supplanted by literacy and school graduation in 1910.

VARIABLE	VALUE	MEAN	STD	N
CH/WOMAN RATIO	1885	612.3	---	423
	1900	809.0	---	602
	1910	599.2	---	731
	1930	392.4	---	2026
CHILD BORN	1900	3.50	2.36	354
	1910	4.60	3.30	401
CHILD ALIVE	1900	3.15	2.14	355
	1910	3.35	2.46	390
CHILD/HSGLD	1885	1.64	1.95	390
	1900	1.94	2.13	564
	1910	1.82	2.32	689
	1930	1.36	1.98	1900
FIRST BIRTH	1885	20.39	3.87	153
	1900	20.68	3.61	219
	1910	20.77	3.40	229
	1930	20.70	3.03	576
LAST BIRTH	1885	36.84	5.96	64
	1900	38.33	5.97	113
	1910	35.14	6.58	138
	1930	35.82	5.59	250
BIRTHSPACE	1885	3.67	2.56	159
	1900	3.29	2.05	275
	1910	2.91	1.53	286
	1930	3.08	1.73	616
SURVIVORSHIP	1900	.917	.163	320
	1910	.768	.271	367

Table 44. Overall Fertility
WHITE EARTH, 1885-1930

E. WHITE EARTH

Overall fertility statistics for White Earth are shown in Table 44. The child/woman ratio on the reservation was quite high--612.3--in 1885 and rose to 809 in 1900 before declining to 599.2 in 1910 and 392.4 in 1930. Despite these shifts, other

CHRT	1885		1900		1910		1930	
	RATIO	WOMEN	RATIO	WOMEN	RATIO	WOMEN	RATIO	WOM
0-4	0	127	0	273	0	269	0	523
5-9	0	105	0	206	0	208	0	671
10-14	0	104	0	165	0	191	3	593
15-19	150	100	65	138	80	174	45	491
20-24	638	69	936	94	664	131	447	394
25-29	1030	66	1183	104	1125	104	704	307
30-34	1000	53	1462	78	917	84	646	254
35-39	944	54	1031	65	863	95	540	226
40-44	350	40	947	76	595	84	374	195
45-49	341	41	298	47	186	59	138	159
50-54	0	24	155	58	21	47	20	98
55-59	43	24	31	32	53	38	8	123
60-64	0	17	25	40	0	30	23	86
65-69	0	10	0	22	0	19	0	56
70+	0	10	0	20	53	19	0	53

Table 45. Child/Woman Ratio by Cohort
WHITE EARTH

measures of fertility remained relatively constant. Data on children alive varied only slightly between 1900 and 1910, and age at first birth remained approximately 20 for the entire study period.

Shifts in fertility at White Earth appear to reflect shorter birth spacing (this measure declined every year fertility rose), and a relatively high rate of survivorship. Where the Hopi reservation experienced survival rates for children of about 50%, the rate at White Earth in 1900--the year the child/woman ratio reached its peak--was more than 91%.

Age-specific statistics are shown in Tables 45-46. In 1885, no woman under 15 years had any children listed, but the child/woman ratio (Table 45) rose above zero in the 15-19 cohort, and peaked in the 25-29 year cohort at 1030. The Child/woman

CHRT	TOTAL	1900 RATIO	WOMEN	TOTAL	1910 RATIO	WOMEN
0-4	0	0.00	273	2	0.01	269
5-9	0	0.00	206	0	0.00	208
10-14	1	0.01	165	0	0.00	191
15-19	9	0.07	138	17	0.10	174
20-24	107	1.14	94	115	0.88	131
25-29	228	2.19	104	255	2.45	104
30-34	273	3.50	78	320	3.81	84
35-39	267	4.11	65	470	4.95	95
40-44	313	4.12	76	555	6.61	84
45-49	194	4.13	47	407	6.90	59
50-54	186	3.21	58	281	5.98	47
55-59	103	3.22	32	184	4.84	38
60-64	114	2.85	40	126	4.20	30
65-69	33	1.50	22	115	6.05	19
70+	54	2.70	20	119	6.26	19

Table 46. Children Born by Cohort
WHITE EARTH

CHRT	TOTAL	1900 RATIO	WOMEN	TOTAL	1910 RATIO	WOMEN
0-4	0	0.00	273	2	0.01	269
5-9	0	0.00	206	0	0.00	208
10-14	1	0.01	165	0	0.00	191
15-19	9	0.07	138	13	0.07	174
20-24	100	1.06	94	86	0.66	131
25-29	204	1.96	104	192	1.85	104
30-34	257	3.29	78	238	2.83	84
35-39	233	3.58	65	345	3.63	95
40-44	278	3.66	76	355	4.23	84
45-49	163	3.47	47	283	4.80	59
50-54	156	2.59	58	169	3.60	47
55-59	69	2.16	32	113	2.97	38
60-64	85	2.13	40	67	2.23	30
65-69	30	1.36	22	58	3.05	19
70+	36	1.80	20	56	2.95	19

Table 47. Children Alive by Cohort
WHITE EARTH

ratio declined after the peak value, reaching zero in the 50-54 cohort, rising slightly in the next and then returning to zero in the 60-64 cohort. Age-specific child\woman ratios for subsequent enumerations followed a similar course, although the "peak" cohort in 1900 was the group aged 30-34. As at other reservations, a rise in overall fertility at the reservation often meant that women remained fertile longer, producing higher child\woman ratios in the older age groups.

Age-specific statistics on children born and alive (Tables 45-47) also indicate that childbearing began after age twenty, but they suggest an additional dimension of survivorship. Particularly in 1910, cohorts of women aged 35-55 reported numbers of births far higher than the tribal average. Comparing these cohorts to the returns for children alive in Table 47, one can see that these were the people who experienced child mortality most intensely. Women aged 50-54, for example, reported bearing an average of nearly six children each. They also noted that on average fewer than four had survived.

Internal Variation

As can be seen in Tables 48-49, variability on the fertility measures is rather complexly patterned for White Earth. The cross-correlations for fertility variables and analysis of sociodemographic factors are equally complex, but mostly reflect the obvious relationships between longevity, birthspacing, survivorship, and numbers of children (see Tables 50-52). There

VARIABLE	CHILD BORN	CHILD LIVE	FIRST BRTH	LAST BRTH	BIRTH SPC	% SURV	CH/W RATIO

1885							
CH ALIVE	-	\		X	X	-	
FIRSTCH	-		\	X		-	X
LASTCH	-	X	X	\	X	-	X
BSPACE	-	X		X	\	-	X
CH/W RATIO	-		X	X	X	-	\
AGE	-	X	X	X	X	-	X
SPAGE	-	X	X	X	X	-	X
MARAGE	-			X		-	X
FAMSIZE	-	X		X	X	-	
BAND	-				X	-	
1900							
CHBORN	\	X		X		X	
CHLIVE	X	\		X	X	X	
FIRSTCH			\	X		X	X
LASTCH	X	X	X	\	X	X	X
BSPACE		X		X	\	X	X
%SURVCH	X	X	X	X	X	\	
CH/W RATIO			X	X	X		\
AGE	X	X	X	X	X	X	X
SPAGE	X	X	X	X	X		X
MSTAT	X	X	X	X			X
MARAGE	X	X	X	X	X	X	X
AGEDIF			X	X			
YRSMAR	X	X		X	X		
EXOAMY	X	X					
EXTEND	X				*		
FAMSIZE	X	X	X	X		X	X
DWELLSIZE			X	X			
BAND	X	X	X	X	X	X	X
SPTRIBE	X	X					
WBLOOD		X	X	X	X		
GEN.EXOG.	X	X					
LOCALITY	X	X	X		X		
OCCUPATION	X	X					X
SPOCCUPAT			X	X		X	
FARM	X	X					
RATIONS	X						
SPEAK	X	X	X	X	X		
SPSPEAK	X	X	X	X	X	X	X
LITERATE			X	X	X		
NAMETYPE		X		X	X		

Table 48. Variables Affecting Fertility in Women 15-45
WHITE EARTH, 1900

VARIABLE	CHILD BORN	CHILD LIVE	FIRST BRTH	LAST BRTH	BIRTH SPC	% SURV	CH/W RATIO
<hr/>							
1910							
CHBORN	\	X		X	X	X	
CHLIVE	X	\	X	X			
FIRSTCH		X	\	X		X	X
LASTCH	X	X	X	\	X	X	X
BSPACE	X			X	\	X	X
%SURVCH	X		X	X	X	\	X
CH/W RATIO			X	X	X	X	\
AGE	X	X	X	X	X	X	X
SPAGE	X	X	X	X	X	X	X
MSTAT				*	X		X
MARAGE			X	X			X
AGEDIF			X				
YRSMAR	X	X		X	X	X	
NUMAR			X	X	X	X	
EXOAMY		X			X	X	
EXTEND		X		X	X	X	X
FAMSIZE	X	X	X	X			X
SPTRIBE		X	*			X	
WBLOOD					X	X	X
GENEREXOG		X			X	X	X
PAREXOGAMY		X			X	X	
SPOCCUPAT	X		X	X	X	X	X
RESIDE	X	X		X		X	X
TAXED					X	X	X
LITERATE	X			X	X	X	X
GRADUATE	X						
NAMETYPE					X	X	
<hr/>							
1930							
CH ALIVE	-	\		X	X	-	X
FIRSTCH	-		\	X		-	X
LASTCH	-	X	X	\	X	-	
BSPACE	-	X		X	\	-	X
CH/W RATIO	-	X	X		X	-	\
AGE	-	X	X	X	X	-	X
SPAGE	-	X	X	X		-	X
MSTAT	-	X	X	X		-	X
MARAGE	-		\	X		-	X
AGEDIF	-		X	X		-	
FAMSIZE	-	X		X	X	-	X
BAND	-	X	X	X		-	X
ATJURIS	-	X		X		-	X

Table 49. Variables Affecting Fertility in Women 15-45
WHITE EARTH, 1910

VARIABLE	CHILD BORN	CHILD LIVE	FIRST BRTH	LAST BRTH	BIRTH SPC	% SURV	CH/W RATIO
<hr/>							
1885							
CH ALIVE	-	1.000					
FIRSTCH	-		1.000				
LASTCH	-	.446	.622	1.000			
BSPACE	-	-.223		.444	1.000		
CH/W RATIO	-		-.250	-.182	-.254	-	1.000
<hr/>							
1900							
CHBORN	1.000						
CHLIVE	.925	1.000					
FIRSTCH			1.000				
LASTCH	.505	.468	.591	1.000			
BSPACE		-.134		.385	1.000		
%SURVCH	-.236	.128	-.162	-.149	-.255	1.000	
CH/W RATIO			-.166	-.177	-.329		1.000
<hr/>							
1910							
CHBORN	1.000						
CHLIVE	.795	1.000					
FIRSTCH		-.144	1.000				
LASTCH	.706	.651	.435	1.000			
BSPACE	.208			.346	1.000		
%SURVCH	-.485		-.140	-.222	-.410	1.000	
CH/W RATIO			-.232	-.152	-.303	.260	1.000
<hr/>							
1930							
CH ALIVE	-	1.000					
FIRSTCH	-		1.000				
LASTCH	-	.578	.667	1.000			
BSPACE	-	-.315		.266	1.000		
CH/W RATIO	-	.245	-.185		-.212	-	1.000

Table 50. Cross-Correlations for Fertility Variables,
WHITE EARTH, 1885-1930

is also direct evidence that survivorship of children declined as women aged. The negative correlations between survivorship and number of children born and birthspacing indicate an attempt to maximize the number of children. The associations of both the younger age sample and the older age sample also show only the most obvious associations.

Internal divisions, bands at White Earth, played an important role in patterning variability in fertility on all censuses except 1910, where it is not reported (Table 53). Bands known to contain large numbers of "mixed-bloods", such as Pembina and Mississippi, and whose members were generally less "traditional" had much shorter birth intervals than the other bands. In 1900, women in these "mixed-blood" bands had their first children later than usual, though this difference between bands declined markedly by 1930. The relationships of band

VARIABLE	CHILD BORN	CHILD LIVE	FIRST BRTH	LAST BRTH	BIRTH SPC	% SURV	CH/W RATIO

1885							
AGE	-	.390	.591	.909	.421	-	-.518
SPAGE	-	.302	.419	.653	.270	-	-.476
MARAGE	-			.622		-	-.250
FAMSIZE	-	.985		.427	-.212	-	
1900							
AGE	.456	.417	.534	.902	.382	-.148	-.489
SPAGE	.374	.356	.287	.598	.231		-.376
MARAGE	-.136	-.194	.721	.500	.219	-.174	-.457
AGEDIF			.208	.199			
YRSMAR	.614	.615		.616	.255		
FAMSIZE	.703	.759	-.162	.394		.128	.210
MAR. STATUS							
Married	3.63	3.26	20.49				1211.0
Present							
Married	3.83	3.22	22.92				1107.0
Absent							
Widowed	3.04	2.87	19.73				882.4
Divorced	2.06	1.94	21.36				850.0
Single	1.00	1.00	21.30				62.8
EXTEND							
None	3.52						
Vertical	4.73						
Lateral	3.14						
Both	2.50						

Table 51. Effects of Sociodemographic Factors on Fertility
WHITE EARTH, 1885-1900

VARIABLE	CHILD BORN	CHILD LIVE	FIRST BRTH	LAST BRTH	BIRTH SPC	% SURV	CH/W RATIO
<hr/>							
			1910				
AGE	.609	.510	.453	.838	.300	-.260	-.476
SPAGE	.481	.426	.193	.568	.183	-.165	-.371
MARAGE			.576	.250			-.185
AGEDIF			.203				
YRSMAR	.665	.558		.606	.275	-.289	
NUMAR			.176	.167	.173	-.177	
FAMSIZE	.638	.791	-.273	.475			.244
MAR. STATUS							
Married					2.84		898.2
present							
Married					3.10		541.7
Absent							
Widowed					4.08		160.0
Divorced					2.76		800.0
Single					2.33		27.4
EXTEND							
None		3.54			2.87	.787	625.9
Vertical		2.54			3.50	.661	528.7
Lateral		2.93			2.48	.737	680.0
Both		3.25			2.81	.780	714.3
Unrelated		1.40			3.00	.583	0.0
<hr/>							
			1930				
AGE	-	.331	.650	.787	.311	-	-.476
SPAGE	-	.292	.190	.422		-	-.371
MARAGE	-		1.000	.667		-	-.185
AGEDIF	-		.432	.276		-	
FAMSIZE	-	.999		.572	-.320	-	.244
MSTAT							
Married				19.88			837.6
Present							
Married				20.80			610.2
Absent							
Widowed				20.60			428.6
Divorced				33.00			0.0
Single				21.45			58.2

Table 52. Effects of Sociodemographic Factors on Fertility
WHITE EARTH, 1910-1930

VARIABLE	CHILD BORN	CHILD LIVE	FIRST BRTH	LAST BRTH	BIRTH SPC	% SURV	CH/W RATIO
<hr/>							
1885							
BAND							
Otter Tail					2.66	---	
Pembina					4.37	---	
<hr/>							
1900							
BAND							
Mille Lac	4.67	4.37	19.00		3.08	.946	864.4
Gull Lake	3.14	3.08	18.40		2.95	.972	341.5
Fond du Lac	4.56	4.49	20.29		3.01	.986	1538.0
Pembina	2.97	2.60	21.33		2.99	.881	645.2
Cass & Winnibi- goshish	2.40	2.40	17.33		4.96	1.000	1000.0
Mississippi	3.83	3.43	21.45		2.61	.911	845.8
White Oak Point	4.50	4.00	19.33		4.40	.902	600.0
Otter Tail	3.16	2.88	20.69		3.69	.931	881.9
Leech Lake	3.50	2.86	20.70		5.05	.827	878.1
<hr/>							
1910							
<hr/>							
1930							
BAND							
Mille Lac		1.53	20.20	36.13	3.08		446.8
Gull Lake		0.97	20.42	33.03	2.95		220.0
Fond du Lac		0.76	20.14	---	3.01		259.3
Pembina		1.28	20.11	34.36	2.99		304.1
Cass & Winnibi- goshish		1.53	20.33	30.00	4.96		411.8
Mississippi		1.37	20.90	35.62	2.61		385.3
White Oak Point		1.11	22.00	38.33	4.40		459.2
Otter Tail		1.47	20.34	37.90	3.69		428.0
Leech Lake		1.67	21.71	37.22	5.05		602.7

Table 53. Effects of Internal Divisions on Fertility
WHITE EARTH, 1885-1930

membership to other aspects of fertility are less clear and consistent.

Economic activities also played an important role in 1900 and 1910, as shown in Table 54. In general, farmers had the most children and women whose families engaged in westernized economic

VARIABLE	CHILD BORN	CHILD LIVE	FIRST BRTH	LAST BRTH	BIRTH SPC	% SURV	CH/W RATIO
<hr/>							
1900							
OCCUPATION							
None	2.35	2.29					800.0
Farmer/ Rancher	4.24	3.83					1324.0
Wage Labor	2.38	2.25					307.7
SP. OCCUPAT							
None						1.000	
Farmer/ Rancher						.907	
Native Economy						.921	
Intermed.						.917	
Wage Labor						.922	
Proprietary						.826	
FARM							
Yes	4.32	3.94					
No	3.04	2.87					
RATIONS							
Yes	2.39						
No	3.56						
<hr/>							
1910							
SP. OCCUPAT							
None	4.45	2.52	19.35		3.51	.657	487.8
Farmer/ Rancher	5.88	4.37	20.34		2.92	.797	1039.0
Native Economy	3.85	3.00	20.20		3.45	.812	333.3
Intermed.	4.94	3.06	21.00		2.86	.673	818.2
Wage Labor	4.14	3.20	20.89		2.67	.788	931.2
Proprietary	4.62	3.35	21.67		2.70	.784	1139.0
RESIDE							
Yes	5.61	4.61				.859	809.0
No	4.37	3.10				.744	580.1
TAXED							
Yes					2.79	.803	694.7
No					3.60	.650	409.1

Table 54. Effects of Economic Factors on Fertility
WHITE EARTH, 1885-1930

activities had children later, but at shorter intervals. These women also tended to have more children overall. Surprisingly, survivorship was highest for the children of women involved in

VARIABLE	CHILD BORN	CHILD LIVE	FIRST BRTH	LAST BRTH	BIRTH SPC	% SURV	CH/W RATIO
<hr/>							
1900							
SPEAK							
Yes	3.80	3.40			2.68		
No	3.14	2.78			4.08		
SP. SPEAK							
Yes	3.86	3.54			2.84	.968	1308.0
No	3.05	2.59			4.24	.875	939.4
LITERATE							
Yes					2.46		
No					3.93		
NAME TYPE							
European		3.35			2.75		
Indian		2.87			4.07		
<hr/>							
1910							
LITERATE							
Yes	4.33			36.56	2.67	.821	
No	5.21			34.19	3.51	.667	
GRADUATE							
Yes	2.64		22.67			.969	
No	4.67		20.67			.760	
NAME TYPE							
European					2.82	.787	
Indian					3.78	.625	

Table 55. Effects of Educational/Cultural Factors on Fertility
WHITE EARTH, 1885-1930

"traditional" foraging activities. This situation contrasts with all of the other reservations studied, but may reflect only an under reporting of deceased children by more "traditional" women.

Table 55 shows that education and partial adoption of Euro-American cultural traits, such as names, also affected fertility among White Earth women on the censuses studied. A woman's ability to speak English, or that of her husband, literacy, and the use of a European name were all associated with higher fertility. The patterns here are similar to those for economic factors, except that the more "acculturated" women's children

VARIABLE	CHILD BORN	CHILD LIVE	FIRST BRTH	LAST BRTH	BIRTH SPC	% SURV	CH/W RATIO
<hr/>							
1900							
SP. TRIBE							
Chippewa	3.44	3.09					
White	4.82	4.42					
EXOAMY							
Yes	4.82	4.42					
No	3.44	3.09					
GENER.							
EXOAMY							
None	3.47	3.10					
One	4.09	3.80					
Two	5.71	5.14					
WHITE BLOOD							
None		2.91			3.86		
Mixed		3.40			2.70		
<hr/>							
1910							
SP. TRIBE							
Chippewa		3.28				.755	
None		3.97				.844	
EXOAMY							
Yes		4.01			2.49	.842	
No		3.28			2.96	.755	
PAR. EXOAMY							
Yes		4.09			2.56	.842	
No		3.13			3.03	.743	
GENER.							
EXOAMY							
None		3.04			3.11	.733	772.7
One		4.11			2.38	.937	1208.0
Two		4.16			2.83	.840	871.8
WBLOOD							
None				33.26	3.28	.712	414.8
Mix				35.96	2.82	.784	639.1

Table 56. Effects of Inter-marriage on Fertility
WHITE EARTH, 1885-1930

survived at a higher rate.

Inter-marriage produced similar results, as seen in Table 56. "Mixed-blood" women or those married to whites had more children at shorter intervals, of whom more survived. The effects were more pronounced if both the woman and her parents married

VARIABLE	CHILD BORN	CHILD LIVE	FIRST BRTH	LAST BRTH	BIRTH SPC	% SURV	CH/W RATIO
<hr/>							
1900							
LOCALITY							
Becker	3.31	3.03	21.30		3.05		
Polk	3.80	3.50	14.33		3.39		
Norman	4.03	3.63	20.56		2.93		
Beltrami	5.25	4.25	21.00		6.23		
Becker & Norman	3.10	2.69	19.31		4.24		
<hr/>							
1910							
<hr/>							
1930							
ATJURIS							
Yes		1.67		36.97			539.6
No		1.09		34.48			259.9

Table 57. Effects of Locality on Fertility
WHITE EARTH, 1885-1930

exogamously.

While fertility varied by locality, shown in Table 57, the patterns are less clear. The effects of the previously discussed factors were to some extent localized, and much of the geographical patterning undoubtedly reflects the interactions of these factors. Unfortunately, the culturally significant geographic variation is scaled east to west, while the counties listed for 1900 largely divided the reservation into north and south. That women living on the reservation had more living children in 1930 is also somewhat surprising, since women living off the reservation should be the least "traditional". This may indicate a reversal in fertility patterns between "traditional" and "acculturated" women similar to that discussed for the other reservations studied.

Diachronic Change

As can be seen by returning to Table 44, overall fertility patterns changed considerably at White Earth between 1885 and 1930. No clear pattern emerges from these changes, however. The mean number of children born and alive increase between 1900 and 1910, while survivorship declines in the same period. The child/woman ratio and mean number of children peak in 1900 and then decline through 1930. Age at first birth on the other hand steadily increases through 1910, then declines in 1930, while birth space declines through 1910, then rebounds slightly in 1930. Age at last birth oscillates without showing any clear trend.

Changes in variability through time, however, show a general tendency toward increasing variability. The mean numbers of children born and alive and survivorship all become more variable. Mean number of children at home and age at last birth become more variable through 1910, then become less variable in 1930 than they were at the beginning of the period. Variability declines for birthspacing until 1910, after which it rebounds a bit. Only age at last birth consistently declines in variability through the whole period.

Relatively little change seems to occur over time in the variables which affect fertility patterns at White Earth. In general, intermarriage with whites and acceptance of some Euro-American cultural and economic patterns along with band membership appear^s to be the primary factors affecting differences

in fertility throughout the period. It is important to stress that these factors are all connected at White Earth during the period studied. The major change through time seems to be the increasing complexity of assimilative or acculturative patterns and a decline in the significance of band or locality.

III. Comparisons Between Tribes

Significant differences exist among the five groups in terms of overall fertility statistics, variability and patterning of variability, and change through time. There are also important similarities. Examining these may illuminate the cultural and demographic processes underlying our statistics.

A. OVERALL STATISTICS

As can be seen in Tables 57-64, overall fertility statistics vary greatly from tribe to tribe, though the tribes did not differ significantly on all measures in every year. In some years, most of the tribes were essentially similar on one or more measures and in a few cases all of the tribes had comparable values on one or more measures in a given year.

Colville consistently had lower than usual child/woman ratios and mean ages at last birth. White Earth on the other hand had shorter birth intervals and high survival rates for children. Hopi consistently combined high birthrates with low survivorship.

Similarities exist between tribes on particular measures or in particular years, but these similarities are not consistent. The correspondences in measures of fertility between tribes also do not reflect clear similarities in indigenous cultural patterns or contact histories. Most significantly, all of the tribes become more similar on all measures by 1930. It is also

	1885		1900		1910*		1930	
TRIBE	MEAN	STD	MEAN	STD	MEAN	STD	MEAN	STD
Colville	282.9	574.9	212.0	467.3	559.2	810.4	333.8	652.0
Creek	---	---	499.3	780.3	607.7	857.9	---	---
Crow	311.2	529.7	395.9	606.8	479.7	723.7	624.4	907.6
Hopi	438.2	665.3	618.7	778.5	630.0	802.9	536.5	796.6
White	612.3	782.5	818.5	1001.	616.2	913.0	392.4	705.9
Earth								

Table 57. Intergroup Comparisons - Child/Woman Ratio

	1885		1900		1910		1930	
TRIBE	MEAN	STD	MEAN	STD	MEAN	STD	MEAN	STD
Colville	---	---	1.64	1.59	3.30	2.58	---	---
Creek	---	---	3.15	2.81	3.27	2.78	---	---
Crow	---	---	2.60	1.91	3.82	2.34	---	---
Hopi	---	---	4.77	3.65	4.84	3.44	---	---
White	---	---	3.52	2.41	4.54	3.31	---	---
Earth								

Table 58. Intergroup Comparisons - Children Born

	1885		1900		1910		1930	
TRIBE	MEAN	STD	MEAN	STD	MEAN	STD	MEAN	STD
Colville	---	---	1.28	1.38	2.29	1.93	---	---
Creek	---	---	2.19	2.05	2.42	2.13	---	---
Crow	---	---	1.54	1.34	2.38	1.75	---	---
Hopi	---	---	2.26	1.85	2.90	1.90	---	---
White	---	---	3.17	2.20	3.36	2.51	---	---
Earth								

Table 59. Intergroup Comparisons - Children Alive

	1885		1900		1910		1930	
TRIBE	MEAN	STD	MEAN	STD	MEAN	STD	MEAN	STD
Colville	1.06	1.30	0.94	1.29	1.66	1.86	1.35	1.93
Creek	---	---	1.35	1.85	1.54	1.90	---	---
Crow	1.08	1.18	1.12	1.16	1.36	1.63	1.48	1.96
Hopi	1.56	1.72	1.69	1.74	1.93	1.97	1.64	2.02
White	1.28	1.95	1.43	2.17	1.69	2.33	1.41	1.98
Earth								

Table 60. Intergroup Comparisons - Children per Household

* no significant differences

	1885		1900		1910		1930	
TRIBE	MEAN	STD	MEAN	STD	MEAN	STD	MEAN	STD
Colville	19.83	4.21	21.38	4.54	20.10	4.73	19.98	3.42
Creek	---	---	19.79	4.14	19.97	4.93	---	---
Crow	20.72	4.29	20.37	5.89	19.82	4.11	21.03	3.87
Hopi	18.92	3.53	20.24	4.15	19.26	8.59	20.48	3.32
White	20.34	3.87	20.75	3.76	20.79	3.38	20.70	3.03
Earth								

Table 61. Intergroup Comparisons - Age at First Birth

	1885		1900		1910		1930*	
TRIBE	MEAN	STD	MEAN	STD	MEAN	STD	MEAN	STD
Colville	30.24	6.52	32.66	6.82	32.61	7.29	35.17	5.37
Creek	---	---	34.02	7.03	36.17	6.26	---	---
Crow	33.46	6.45	35.39	6.25	36.44	4.84	36.81	5.08
Hopi	31.87	6.64	34.45	8.07	36.50	7.01	35.70	6.11
White	36.82	6.01	37.76	5.81	35.55	6.57	35.71	5.64
Earth								

Table 62. Intergroup Comparisons - Age at Last Birth

	1885		1900		1910		1930*	
TRIBE	MEAN	STD	MEAN	STD	MEAN	STD	MEAN	STD
Colville	4.03	2.59	4.23	3.06	3.99	2.52	3.36	2.20
Creek	---	---	3.51	2.38	3.77	2.91	---	---
Crow	6.18	3.76	5.14	3.18	4.58	2.80	3.12	1.85
Hopi	4.20	2.30	4.13	2.42	4.65	3.22	3.37	1.64
White	3.67	2.56	3.27	2.04	2.91	1.65	3.08	1.73
Earth								

Table 63. Intergroup Comparisons - Birthspacing

	1885		1900		1910		1930	
TRIBE	MEAN	STD	MEAN	STD	MEAN	STD	MEAN	STD
Colville	---	---	.808	.325	.762	.332	---	---
Creek	---	---	.743	.321	.772	.289	---	---
Crow	---	---	.636	.330	.664	.306	---	---
Hopi	---	---	.530	.308	.680	.290	---	---
White	---	---	.915	.166	.778	.265	---	---
Earth								

Table 64. Intergroup Comparisons - Survivorship

* no significant differences

illuminating to note that the Hopi and Creek or Crow and White Earth pairings consistently show the fewest similarities.

This situation therefore indicates that fertility among these five tribes is conditioned by unique historical circumstances which mask any uniform social processes at work. The data, however, also suggest that the dynamics of Indian-white relations in the early twentieth century propelled each tribe toward a common "Indian" fertility regime. Further, intensity of interaction with Euro-American society and degree of initial cultural homogeneity strongly affected the trajectory toward this "goal", since the two pairings contrast the most isolated and homogeneous tribes with the most interactive and heterogeneous.

B. INTERNAL VARIATION

The tribes differed considerably both in their degree of overall variability and as to which measures were most variable. Variability on a given measure also changed through time (see below).

White Earth Ojibwas showed the greatest variability overall, though not on all measures. This tribe had the greatest variability on measure of living children (the child/woman ratio, number of children per household, and number of children alive), but also had the lowest variability on age at first birth, rate of survivorship, and age at last birth and birthspacing. The Crow and Hopi also showed considerable variability, but lacked consistency through time. The Colvilles and Creeks were both

more moderate in their variability. The former, however, occasionally reached minimum or maximum variability on a particular measure. The Creeks never did so. These figures suggest consistent cultural norms in a period of dramatic social and economic upheaval. They also indicate that the Crow and Hopi, who were undergoing the most drastic demographic transitions, altered their behaviors quickly in response to differing demographic regimes.

One particularly interesting pattern emerges from an examination of overall variability. This is the apparent linkage between the Crow and White Earth. In any year when one of them has exceptionally high variability on a given measure, the other generally has relatively low variability on that same measure. The reasons for this pattern are far from clear, except that both demographic and economic change came to these reservations at different times. Allotment and the onset of a commercial economy began at White Earth in the 1890s, while at Crow these forces did not really hit home until the founding of a border town at Hardin and the advent of irrigated agriculture a decade later.

As indicated in the discussions of individual tribes, variability was patterned in complex ways, which differed from tribe to tribe. These differences included the nature of the factors affecting variability as well as the scope and degree of their impacts.

Sociodemographic factors consistently affected fertility in all tribes studied. Age, marital status, years married, and

other such variables largely produced predictable results in that married women, older women, and those married longer had more children. Household extension was also related to differences in fertility among all tribes except Colville. While the nature of this relationship is unclear, it may also reflect developmental processes. In general, the consistency of these intuitive results supports the general reliability of the data sets.

There is evidence from the cross-correlations of the fertility variables for most tribes that women sought to achieve some culturally defined "ideal" number of children by adjusting birth spacing or duration of childbearing in response to child mortality. This is particularly evident at Colville and Hopi. The relatively long interval between births for most tribes and the relatively young age for cessation of childbearing also indicate that this ideal was less than the maximum possible.

Internal social and political divisions (such as band, tribe, or village) also played an ongoing role in patterning variability in fertility for the three tribes where they were reported. These divisions produced the most pervasive differences within each tribe, affecting most aspects of fertility including both those deriving directly from cultural rules (i.e., age at first birth and birthspacing) and those which result from the interaction of natural and sociocultural systems (i.e., children born and survivorship). The size of the differences, however, was often less than those produced by other factors discussed below.

Economic factors, such as spouse's occupation or land ownership, played an increasingly significant role in variation in fertility for all tribes. Generally, those women whose husband's farmed or engaged in mercantile pursuits had more children. Most of this difference derived from decreased birthspacing and increased survivorship among women from less "traditional" households in all tribes. Economic factors had the least impact at the two most isolated reservations, Crow and Hopi. The Hopi also differ in that the available evidence suggests developmental/life-cycle differences rather than diversity of economic strategies.

Factors relating to educational attainment or partial acceptance of Euro-American cultural practices (speaking English, literacy, using European-style names) also produced differences in fertility. These factors had the least effect at Colville, where only spouse's language in 1900 was significant and may reflect the impact of intermarriage (see below). The effects of elsewhere were similar to those of economic factors. That is, the least "traditional" women were most fertile, with shorter birth intervals and higher survivorship for their children. Both the range of fertility variables affected and the size of the differences were comparable to those for economic factors.

Intermarriage, particularly to whites, played an especially important role for all tribes except Hopi, where it was almost nonexistent. The effects of intermarriage were essentially similar to those for the last two factors discussed in that it

was consistently associated with increased fertility. While the size of the differences was comparable, the extent tended to be greater, particularly at White Earth and among the Creeks. At Colville, in contrast, intermarriage affected fewer aspects of fertility than did economics. There is also evidence for White Earth and the Creeks that the effects of intermarriage were cumulative with succeeding generations.

Locality of residence also affected fertility on Colville, White Earth, and among the Creeks. This was not reported for the Crow and was synonymous with tribal subdivisions among the Hopi. For all three groups, the effects of locality are difficult to interpret for reasons discussed above. The interaction of the previously mentioned factors provides the most likely explanation for this variability. As has been mentioned previously, location increasingly became a focus for a variety of social and economic forces.

C. TEMPORAL CHANGE

Comparing temporal changes in fertility patterns also shows significant trends shared by all or most of the groups. The mean numbers of children born and alive increase between 1900 and 1910 for all tribes, though the increase in number of children born for the Creeks is very minor and probably not significant. Mean age at last birth between 1885 and 1900 also increases for all groups except White Earth among whom this measure shows an

irregular, but general decline. Survivorship increases among most of the groups between 1900 and 1910. Colville and White Earth are exceptions here.

The child/woman ratio also generally increases for most of the tribes, though the Hopis show a slight decline between 1910 and 1930. The Colvilles also show an upward trend on this measure, though it is less even, while at White Earth child/woman ratio generally declines after 1900. The mean number of children at home shows essentially the same patterns. The mean birth interval on the other hand generally declines between 1885 and 1930 for everyone except the Creeks and Hopis for whom it generally increases.

Trends on mean age at first birth are not so consistent among the tribes. Among the Creeks and White Earth Chippewas, it increases through time. The same is true among the Hopis before 1930 when there is a slight decline. Among the Colvilles and Crows the trends are not clear.

D. VARIABILITY TRENDS

Comparisons of overall variability trends also shows clear patterns. The number of children born becomes increasingly variable among all groups except the Creeks and Hopis. Variability also increases on number of children alive for everyone and on children at home for all except White Earth where variability declines precipitously in 1930.

Age at first birth, birthspacing, and survivorship of

children conversely become less variable through time for most groups. Age at first birth, however, becomes more variable among the Colville and Creeks, though the former experience a sharp decline in variability in 1930. Variability increases on birthspacing among the Creeks and Hopis, though the latter also experience a decline in variability in 1930. Colville and White Earth are the exceptions for survivorship and both become more variable through time.

Examining the factors affecting variability shows a number of interesting patterns. The Creeks stand out, because they are the only group for whom all of the identified factors become less significant through time. The Crows are also interesting since most factors, except purely demographic ones, become increasingly significant through time. The Creeks have largely completed, by 1910, the social and economic transition which the other tribes are just beginning. The Crows are the last of the tribes studied to make this transition, except for the Hopi who do not make it during the study period.

For everyone except Colville and the Crows, sociodemographic factors become less important in determining variability through time. Among the Crows and Colvilles, these become increasingly important in determining variability. This suggests increasing homogeneity and the possible emergence of a "reservation culture" among each of these two tribes, which reduces earlier differences between bands or tribes on each reservation.

As mentioned, sociodemographic forces decline in

significance at the other three agencies. Among the Creeks the decline is constant, but is uneven for the other two tribes. This decline in statistical significance undoubtedly reflects increased heterogeneity among these tribes, since age, marital status, years married, etc., continued to impact fertility. This increased diversity reflected the emergence of new, multiple cultural patterns at each of these agencies. Thus the effects of age, marital status, and other sociodemographic factors became less consistent for each tribe as a whole.

Social, economic, and cultural factors on the other hand become increasingly important for almost everyone. The Creeks are the major exception for all of these. Cultural factors also declined in importance among the White Earth Chippewas. These two groups, the Creeks and White Earth, had the greatest exposure to and were most affected by Euro-American culture prior to 1900. This fact increases the significance of the distinction between them and the other tribes.

IV. CONCLUSIONS

1. All of the tribes experienced a demographic transition during the study period. In all cases fertility increased during this period after a century of decline. In the case of all except Hopi and Colville, there was a peak followed by a slight decline, but all ended with higher fertility rates than at the beginning.

2. Increased fertility was a consequence of shorter birth-spacing, extended periods of childbearing, and/or higher rates of survival. None of the tribes reported a dropping age at first birth, dramatic shifts in other cultural practices (polygyny), or other changes that might produce increased fertility. Many of these changes may reflect improved health care and nutrition for Indians during the early twentieth century.

3. Interaction with Euro-Americans produced marked increases in fertility among all tribes studied prior to 1930. Such contact occurred through intermarriage, engagement in the market economy, and/or education and promoted greater heterogeneity within the tribes. All of these factors became more important through time for all except the Creeks and White Earth Ojibwas. The two latter already had long histories of such interaction prior to 1900 and likely experienced similar effects earlier.

4. Despite the greater heterogeneity of tribal populations and increasing fertility over the fifty year period, persistent cultural continuities are evident. These are most marked in the age at first birth and in the correlations among the fertility variables which relate to "ideal" numbers of children. Birthspacing also remains rather conservative, despite an overall decline reflecting greater heterogeneity. Women at the end of the study period still have children at longer intervals than did

Euro-Americans, and those who are most "traditional" change least. Even as some communities appear to approach a Euro-American cultural "norm", the five reservations together continue to reflect distinctive cultural traditions.

5. All of the tribes become more similar to one another through time. The marked convergence of all of the tribes by 1930 suggests that a new American Indian demographic and fertility regime emerged, primarily between 1910 and 1930. This new regime features high fertility through reduced birthspacing and prolonged childbearing, a rise in survivorship, greater fertility for non-exogamous ("full-blood") couples than for mixed couples, and a trend toward smaller families. Importantly, both birthspacing and survivorship continue to differ significantly from the Euro-American norms. This regime reflects the economic, social, and medical commonalities of American Indian life in the twentieth century. By 1930, these reflect conditions of marginalization and poverty, a state of affairs which prevails on many reservations to this day.